

03/07/2006 10748085.trn

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LOGINID: SSSPTA1626GMS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * * Welcome to STN International * * * * * * * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 DEC 05 CASREACT(R) - Over 10 million reactions available
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NEWS 5 DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
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NEWS 7 DEC 21 IPC search and display fields enhanced in CA/CAplus with the
IPC reform
NEWS 8 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
USPAT2
NEWS 9 JAN 13 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 10 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
INPADOC
NEWS 11 JAN 17 Pre-1988 INPI data added to MARPAT
NEWS 12 JAN 17 IPC 8 in the WPI family of databases including WPIFV
NEWS 13 JAN 30 Saved answer limit increased
NEWS 14 JAN 31 Monthly current-awareness alert (SDI) frequency
added to TULSA
NEWS 15 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist
visualization results
NEWS 16 FEB 22 Status of current WO (PCT) information on STN
NEWS 17 FEB 22 The IPC thesaurus added to additional patent databases on STN
NEWS 18 FEB 22 Updates in EPFULL; IPC 8 enhancements added
NEWS 19 FEB 27 New STN AnaVist pricing effective March 1, 2006
NEWS 20 FEB 28 MEDLINE/LMEDLINE reload improves functionality
NEWS 21 FEB 28 TOXCENTER reloaded with enhancements
NEWS 22 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral
property data
NEWS 23 MAR 01 INSPEC reloaded and enhanced
NEWS 24 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
<http://download.cas.org/express/v8.0-Discover/>

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Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 14:06:55 ON 07 MAR 2006

```
=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Do you want to switch to the Registry File?
Choice (Y/n) :
Switching to the Registry File...
Some commands only work in certain files. For
command can only be used to look at the index
index. Enter "HELP COMMANDS" at an arrow prompt
commands which can be used in this file.
```

=> FILE REGISTRY

| COST IN U.S. DOLLARS | SINCE FILE
ENTRY | TOTAL
SESSION |
|----------------------|---------------------|------------------|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 14:07:10 ON 07 MAR 2006
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 MAR 2006 HIGHEST RN 876011-49-3
DICTIONARY FILE UPDATES: 6 MAR 2006 HIGHEST RN 876011-49-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

```
*****
* The CA roles and document type information have been removed from
* the IDE default display format and the ED field has been added,
* effective March 20, 2005. A new display format, IDERL, is now
* available and contains the CA role and document type information.
*****

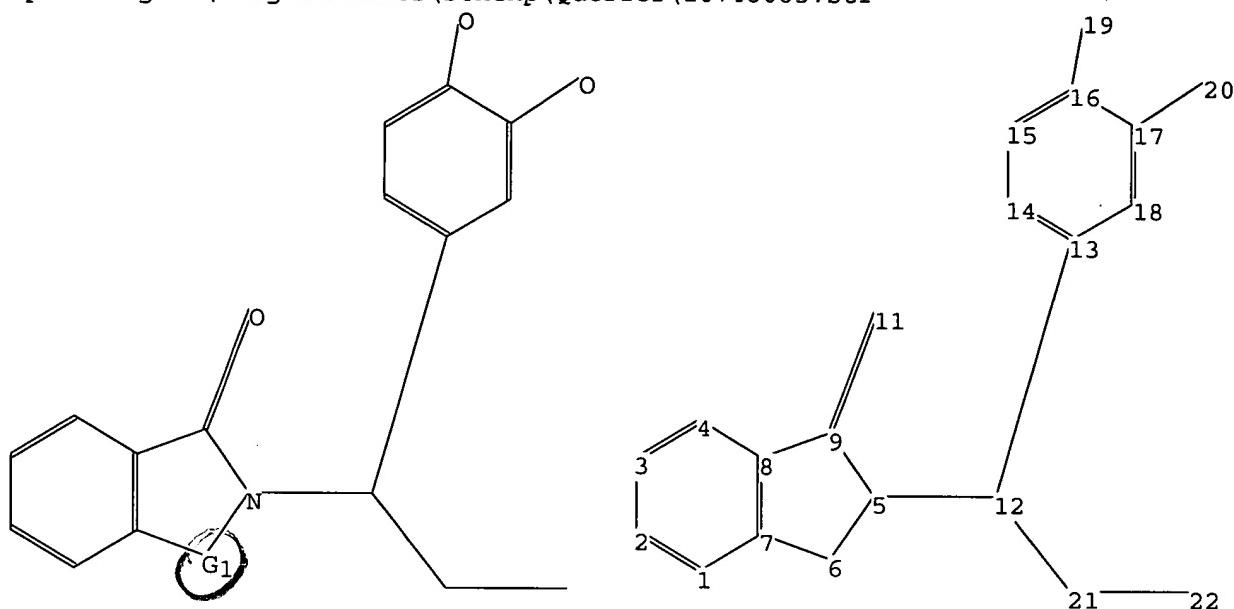
```

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>
Uploading C:\Program Files\Stnexp\Queries\10748085.str



chain nodes :

11 12 19 20 21 22

ring nodes :

1 2 3 4 5 6 7 8 9 13 14 15 16 17 18

chain bonds :

5-12 9-11 12-13 12-21 16-19 17-20 21-22

ring bonds :

1-2 1-7 2-3 3-4 4-8 5-6 5-9 6-7 7-8 8-9 13-14 13-18 14-15 15-16 16-17
17-18

exact/norm bonds :

5-6 5-9 5-12 6-7 8-9 9-11 12-13 12-21 16-19 17-20 21-22

normalized bonds :

1-2 1-7 2-3 3-4 4-8 7-8 13-14 13-18 14-15 15-16 16-17 17-18

isolated ring systems :

containing 1 : 13 :

G1:CH2,SO2,C(O)CH3

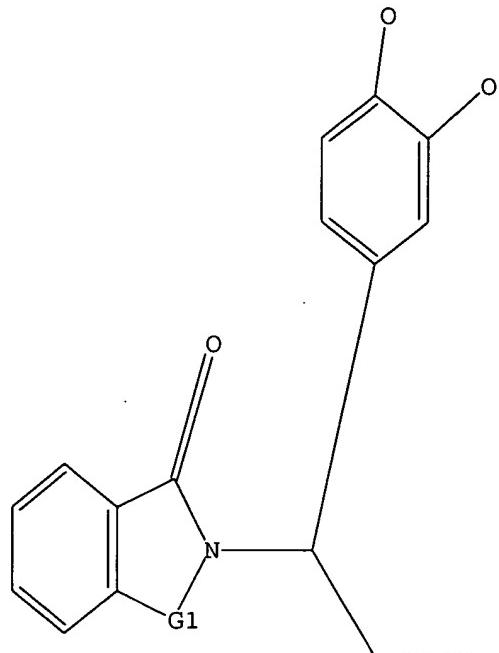
Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS
12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS
21:CLASS 22:CLASS

03/07/2006 10748085.trn

L1 STRUCTURE UPLOADED

=> d 11
L1 HAS NO ANSWERS
L1 STR



G1 CH₂, SO₂, C(O)CH₃

Structure attributes must be viewed using STN Express query preparation.

=> s 11
SAMPLE SEARCH INITIATED 14:07:27 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 22 TO ITERATE

100.0% PROCESSED 22 ITERATIONS 3 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 159 TO 721
PROJECTED ANSWERS: 3 TO 163

L2 3 SEA SSS SAM L1

=> s 11 sss full
FULL SEARCH INITIATED 14:07:35 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 586 TO ITERATE

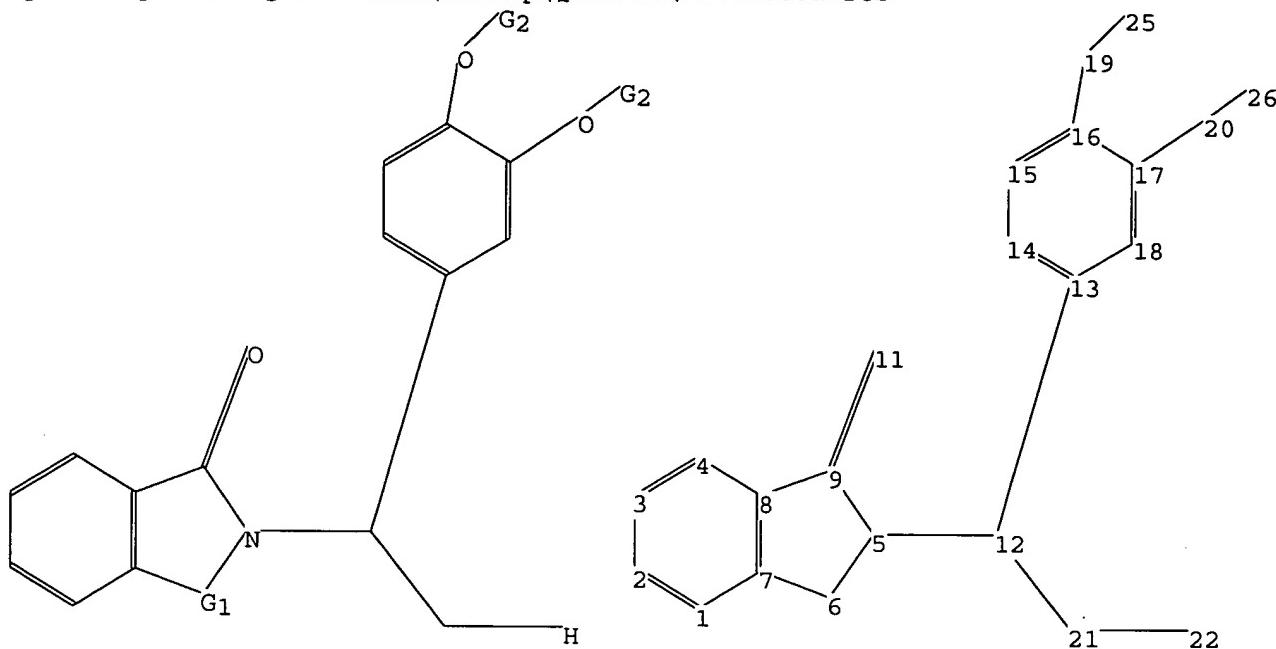
100.0% PROCESSED 586 ITERATIONS
SEARCH TIME: 00.00.01

115 ANSWERS
C.

L3 115 SEA SSS FUL L1

03/07/2006 10748085.trn

=>
Uploading C:\Program Files\Stnexp\Queries\10748085a.str



chain nodes :
11 12 19 20 21 22 25 26

ring nodes :

1 2 3 4 5 6 7 8 9 13 14 15 16 17 18

chain bonds :

5-12 9-11 12-13 12-21 16-19 17-20 19-25 20-26 21-22

ring bonds :

1-2 1-7 2-3 3-4 4-8 5-6 5-9 6-7 7-8 8-9 13-14 13-18 14-15 15-16 16-17
17-18

exact/norm bonds :

5-6 5-9 5-12 6-7 8-9 9-11 12-13 12-21 16-19 17-20 19-25 20-26 21-22

normalized bonds :

1-2 1-7 2-3 3-4 4-8 7-8 13-14 13-18 14-15 15-16 16-17 17-18

isolated ring systems :

containing 1 : 13 :

G1:CH2,SO2,C(O)CH3

G2:CH,Cb,Ak

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS
12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS
21:CLASS 22:CLASS 25:CLASS 26:CLASS

L4 STRUCTURE UPLOADED

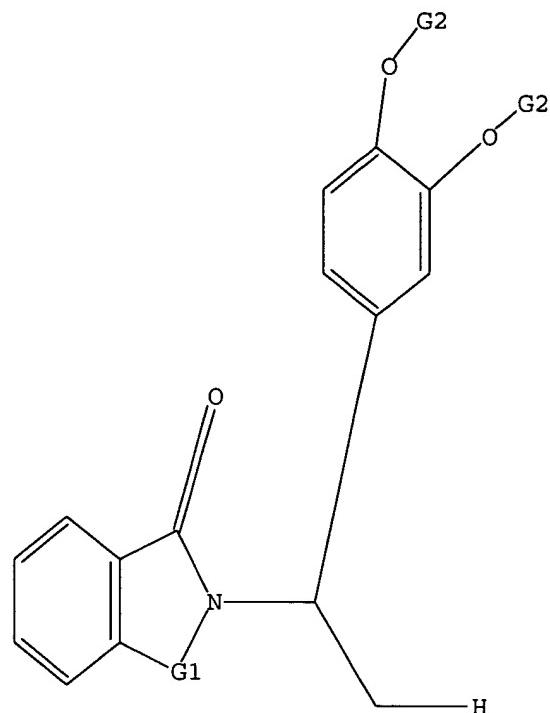
=> d 14

L4 HAS NO ANSWERS

03/07/2006 10748085.trn

L4

STR



G1 CH₂, SO₂, C(O)CH₃

G2 CH,Cb,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 14

SAMPLE SEARCH INITIATED 14:10:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 31 TO ITERATE

100.0% PROCESSED 31 ITERATIONS
SEARCH TIME: 00.00.01

4 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 286 TO 954
PROJECTED ANSWERS: 4 TO 200

L5 4 SEA SSS SAM L4

=> s 14 sss full
FULL SEARCH INITIATED 14:10:33 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 772 TO ITERATE

100.0% PROCESSED 772 ITERATIONS
SEARCH TIME: 00.00.01

149 ANSWERS

L6 149 SEA SSS FUL L4

=> FIL CAPLUS

10748085.trn

Page 6

14:13

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| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 335.64 | 335.85 |

FILE 'CAPLUS' ENTERED AT 14:10:38 ON 07 MAR 2006
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FILE LAST UPDATED: 6 Mar 2006 (20060306/ED)

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=> d his

(FILE 'HOME' ENTERED AT 14:06:55 ON 07 MAR 2006)

FILE 'REGISTRY' ENTERED AT 14:07:10 ON 07 MAR 2006
L1 STRUCTURE UPLOADED
L2 3 S L1
L3 115 S L1 SSS FULL
L4 STRUCTURE UPLOADED
L5 4 S L4
L6 149 S L4 SSS FULL

FILE 'CAPLUS' ENTERED AT 14:10:38 ON 07 MAR 2006

=> s 13
L7 39 L3

=> s 14
REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 14:10:57 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 31 TO ITERATE

100.0% PROCESSED 31 ITERATIONS 4 ANSWERS
SEARCH TIME: 00.00.01

03/07/2006 10748085.trn

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 286 TO 954
PROJECTED ANSWERS: 4 TO 200

L8 4 SEA SSS SAM L4

L9 3 L8

=> FIL HCAPLUS
COST IN U.S. DOLLARS SINCE FILE TOTAL
FULL ESTIMATED COST ENTRY SESSION
0.46 337.21

FILE 'HCAPLUS' ENTERED AT 14:11:15 ON 07 MAR 2006
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FILE COVERS 1907 - 7 Mar 2006 VOL 144 ISS 11
FILE LAST UPDATED: 6 Mar 2006 (20060306/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 14:06:55 ON 07 MAR 2006)

FILE 'REGISTRY' ENTERED AT 14:07:10 ON 07 MAR 2006
L1 STRUCTURE uploaded
L2 3 S L1
L3 115 S L1 SSS FULL
L4 STRUCTURE uploaded
L5 4 S L4
L6 149 S L4 SSS FULL

FILE 'CAPLUS' ENTERED AT 14:10:38 ON 07 MAR 2006
L7 39 S L3
S L4

FILE 'REGISTRY' ENTERED AT 14:10:56 ON 07 MAR 2006
L8 4 S L4

03/07/2006 10748085.trn

FILE 'CAPLUS' ENTERED AT 14:10:57 ON 07 MAR 2006
L9 3 S L8

FILE 'HCAPLUS' ENTERED AT 14:11:15 ON 07 MAR 2006

=> s 13
L10 39 L3

=> s 16
L11 41 L6

=> s l11 and pde4
1075 PDE4
L12 8 L11 AND PDE4

=> d 112 ibib abs hitstr tot

L12 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1155544 HCAPLUS
DOCUMENT NUMBER: 143:416245
TITLE: Methods of using, and compositions comprising,
phosphodiesterase 4 (**PDE4**) modulators for
the treatment and management of pulmonary hypertension
INVENTOR(S): Zeldis, Jerome B.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 33 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 2005239867 | A1 | 20051027 | US 2005-111187 | 20050421 |
| WO 2005102317 | A1 | 20051103 | WO 2005-US13597 | 20050421 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG | | | | |

PRIORITY APPLN. INFO.: US 2004-565174P P 20040423

OTHER SOURCE(S): MARPAT 143:416245

AB Methods of treating, preventing, and managing pulmonary hypertension are disclosed. Specific methods encompass the administration of a **PDE4** modulator, or a pharmaceutically acceptable salt, solvate (e.g., hydrate), stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent, surgery and/or lung transplantation. Specific second active agents are capable of reducing pulmonary artery pressure. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also

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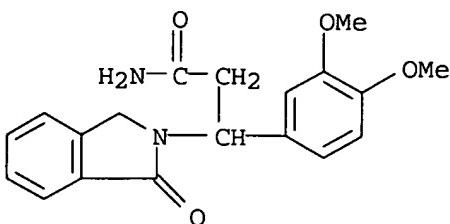
disclosed.

IT 167886-76-2 340019-67-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(phosphodiesterase 4 modulators for treatment of pulmonary
hypertension)

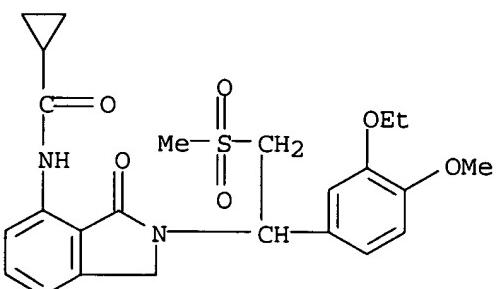
RN 167886-76-2 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-
(9CI) (CA INDEX NAME)



RN 340019-67-2 HCAPLUS

CN Cyclopropanecarboxamide, N-[2-[1-(3-ethoxy-4-methoxyphenyl)-2-
(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA
INDEX NAME)



L12 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:451120 HCAPLUS

DOCUMENT NUMBER: 142:476229

TITLE: Methods of using and compositions comprising
PDE4 modulators for the treatment and
management of asbestos-related diseases and disorders

INVENTOR(S): Zeldis, Jerome B.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2005046592 | A2 | 20050526 | WO 2004-US37082 | 20041104 |
| WO 2005046592 | A3 | 20051215 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
 SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
 NE, SN, TD, TG

US 2005142104 A1 20050630 US 2004-981190 20041103

PRIORITY APPLN. INFO.: US 2003-518603P P 20031106

OTHER SOURCE(S): MARPAT 142:476229

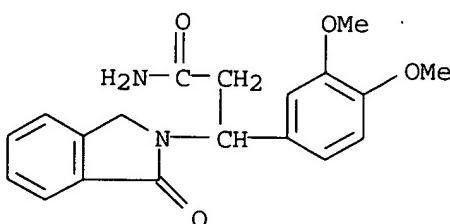
AB Methods of treating, preventing and managing an asbestos-related disease or disorder are disclosed. Specific embodiments encompass the administration of a **PDE4** modulator, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent and/or chemotherapy, surgery, or radiation therapy. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in the methods of the invention are also disclosed. Treatment with 400 mg 3-(3,4-dimethoxyphenyl)-3-(1-oxo-1,3-dihydroisoindol-2-yl)propionamide as a continuous oral daily dose is well-tolerated.

IT 167886-76-2 340019-67-2

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (as **PDE4** modulator; **PDE4** modulators and compns. for treatment and management of asbestos-related diseases and disorders)

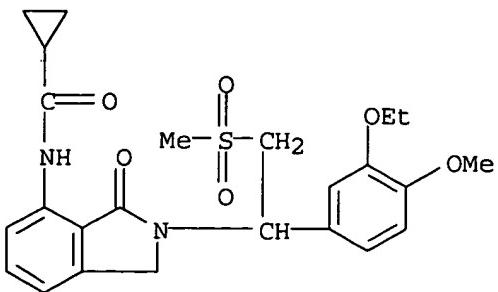
RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-(9CI) (CA INDEX NAME)



RN 340019-67-2 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)



L12 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:780510 HCAPLUS

DOCUMENT NUMBER: 141:277486

TITLE: A preparation of 7-aminoisoindolone derivatives

INVENTOR(S): Man, Hon-Wah; Muller, George W.; Zhang, Weihong

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 109 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2004080423 | A2 | 20040923 | WO 2004-US7743 | 20040312 |
| WO 2004080423 | A3 | 20041104 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2518584 | AA | 20040923 | CA 2004-2518584 | 20040312 |
| US 2004254214 | A1 | 20041216 | US 2004-798317 | 20040312 |
| EP 1605896 | A2 | 20051221 | EP 2004-720448 | 20040312 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK | | | | |
| PRIORITY APPLN. INFO.: | | | US 2003-454155P | P 20030312 |
| | | | WO 2004-US7743 | W 20040312 |

OTHER SOURCE(S): MARPAT 141:277486

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to a preparation of 7-aminoisoindole derivs. of formula I [wherein: Y is C(O), CH₂, CH₂C(O), or SO₂; X is H; Z is -alkyl-CO₂H,

alkyl, -alkyl-OH, or -alkyl-NH₂, etc.; R1 and R2 are independently selected from (cyclo)alkyl or -alkyl-cycloalkyl], useful for treatment, prevention or management of cancer, inflammatory bowel disease, and myelodysplastic syndrome, etc. (no biol. data). For instance, isoindole derivative II was prepared via heterocyclization of aminopropanol derivative III and

benzoic acid derivative IV with a yield of 64% (example 1).

IT 760958-78-9P 760958-80-3P 760958-88-1P

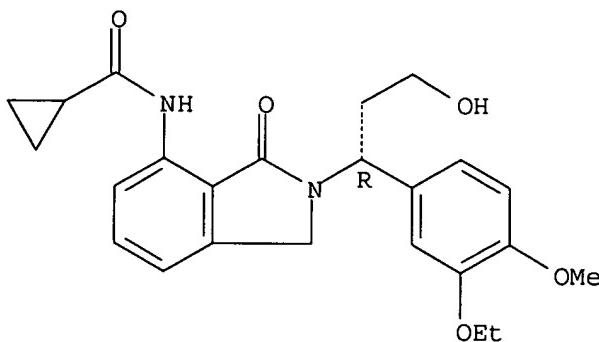
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of aminoisoindolone derivs. via heterocyclization of aminopropanol derivs. and benzoic acid derivs.)

RN 760958-78-9 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-hydroxypropyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

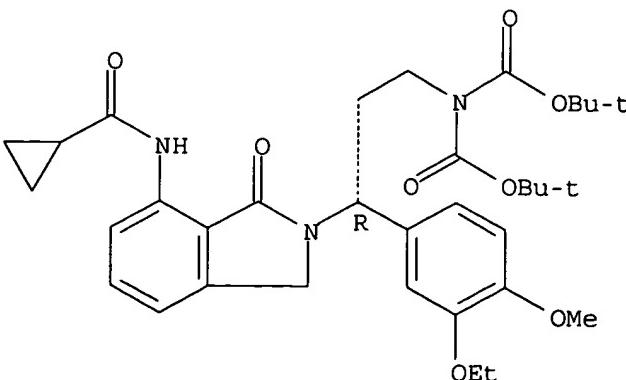
Absolute stereochemistry.



RN 760958-80-3 HCPLUS

CN Imidodicarbonic acid, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)propyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

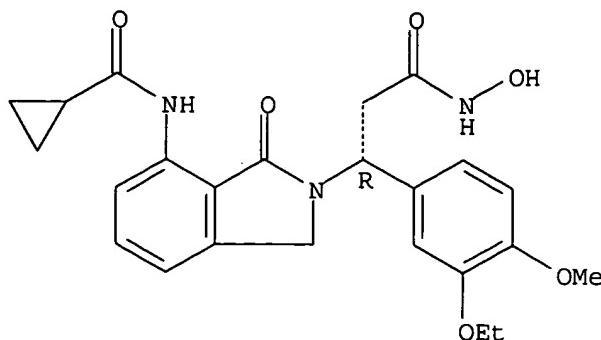
Absolute stereochemistry.



RN 760958-88-1 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]-β-(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-hydroxy-1-oxo-, (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 760958-82-5P 760958-83-6P 760958-85-8P
 760958-86-9P 760958-87-0P 760958-90-5P
 760958-91-6P 760958-93-8P 760958-96-1P
 760958-97-2P 760958-98-3P 760958-99-4P
 760959-00-0P 760959-03-3P 760959-04-4P
 760959-06-6P 760959-07-7P 760959-09-9P
 760959-12-4P 760959-13-5P 760959-14-6P
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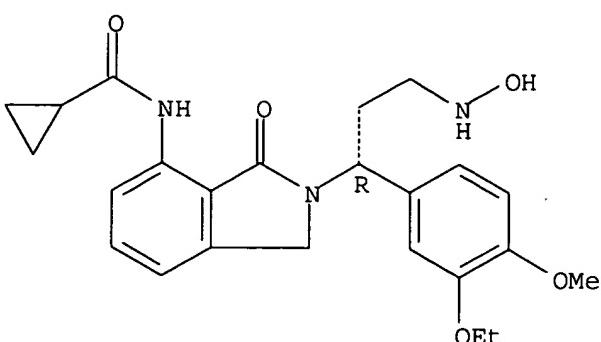
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminoisoindolone derivs. via heterocyclization of aminopropanol derivs. and benzoic acid derivs.)

RN 760958-82-5 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(hydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

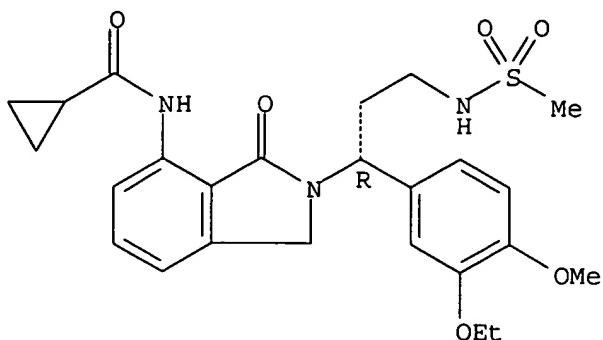
Absolute stereochemistry.



RN 760958-83-6 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-[(methylsulfonyl)amino]propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

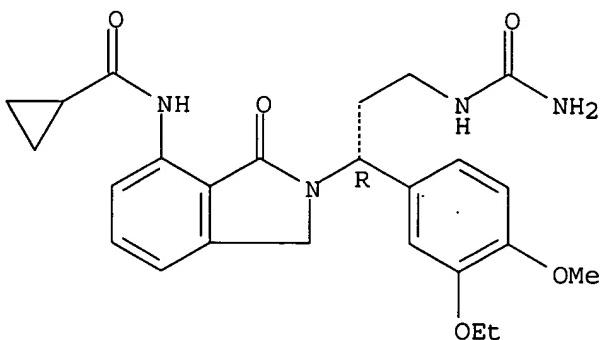
Absolute stereochemistry.



RN 760958-85-8 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-3-[(aminocarbonyl)amino]-1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

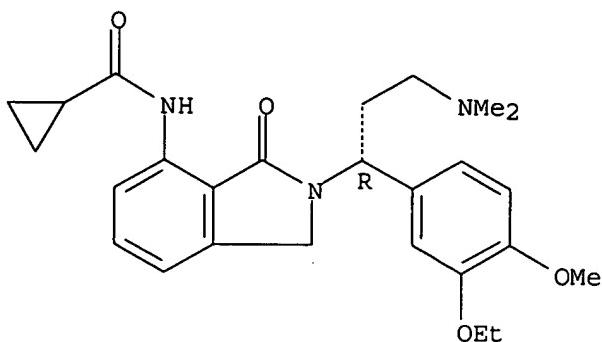
Absolute stereochemistry.



RN 760958-86-9 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-3-(dimethylamino)-1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] -, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

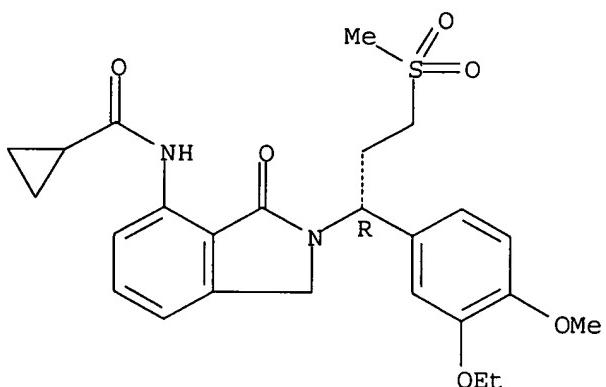


● HCl

RN 760958-87-0 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(methylsulfonyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

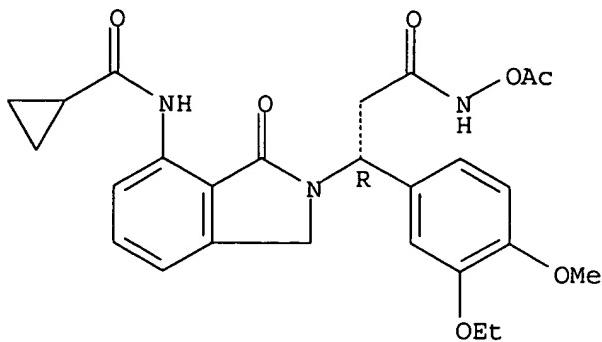
Absolute stereochemistry.



RN 760958-90-5 HCPLUS

CN 2H-Isoindole-2-propanamide, N-(acetyloxy)-7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

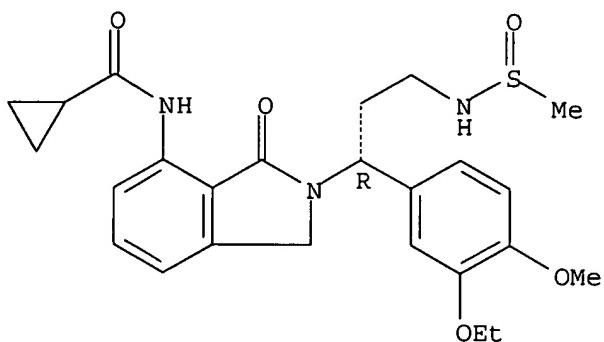
Absolute stereochemistry.



RN 760958-91-6 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-[(methylsulfinyl)amino]propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI)
(CA INDEX NAME)

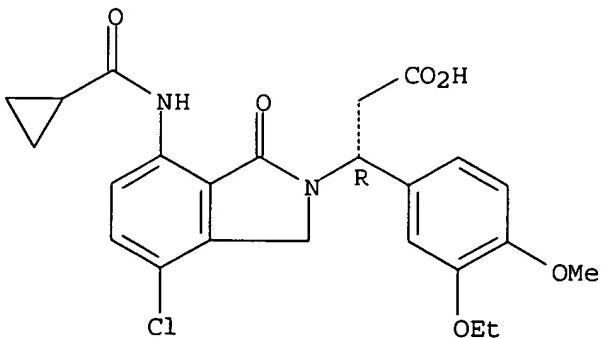
Absolute stereochemistry.



RN 760958-93-8 HCPLUS

CN 2H-Isoindole-2-propanoic acid, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -[3-ethoxy-4-methoxyphenyl]-1,3-dihydro-1-oxo-, (β R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

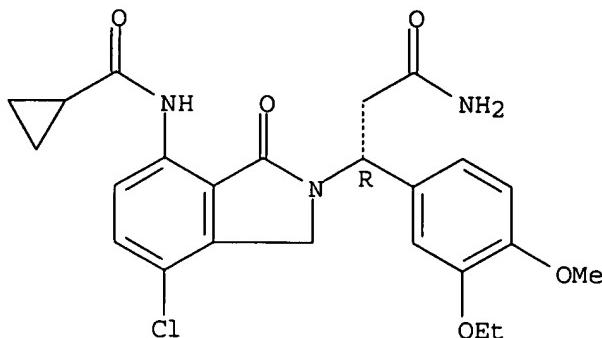


RN 760958-96-1 HCPLUS

CN 2H-Isoindole-2-propanamide, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -

(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (β R) - (9CI) (CA INDEX NAME)

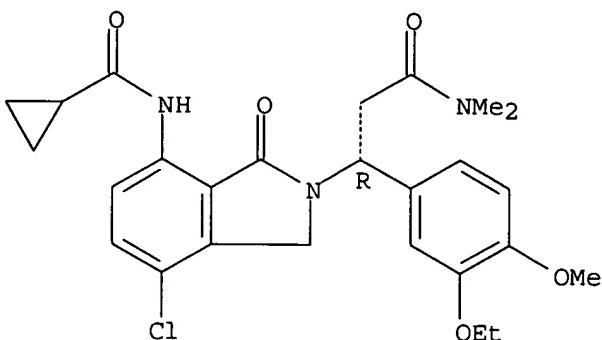
Absolute stereochemistry.



RN 760958-97-2 HCPLUS

CN 2H-Isoindole-2-propanamide, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N,N-dimethyl-1-oxo-, (β R) - (9CI) (CA INDEX NAME)

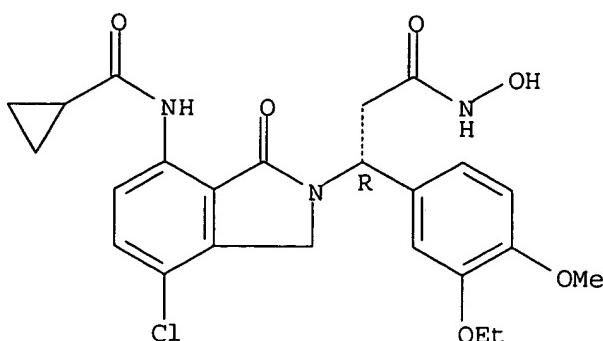
Absolute stereochemistry.



RN 760958-98-3 HCPLUS

CN 2H-Isoindole-2-propanamide, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-hydroxy-1-oxo-, (β R) - (9CI) (CA INDEX NAME)

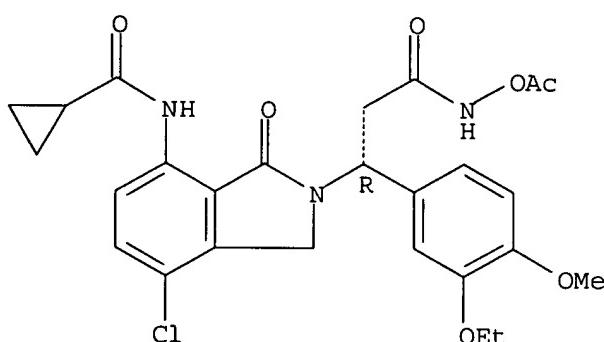
Absolute stereochemistry.



RN 760958-99-4 HCAPLUS

CN 2H-Isoindole-2-propanamide, N-(acetyloxy)-4-chloro-7-[cyclopropylcarbonyl]amino]-β-(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (βR)- (9CI) (CA INDEX NAME)

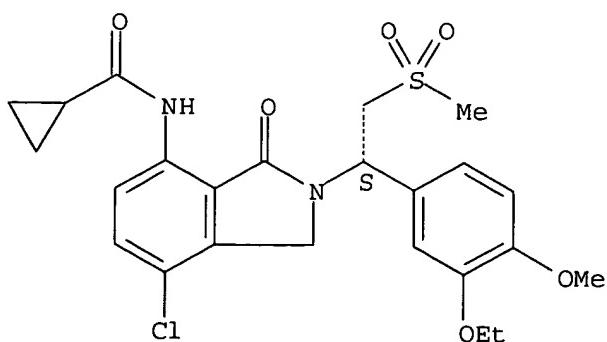
Absolute stereochemistry.



RN 760959-00-0 HCAPLUS

CN Cyclopropanecarboxamide, N-[7-chloro-2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



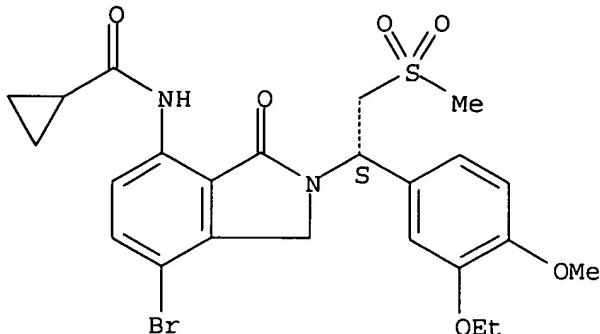
RN 760959-03-3 HCAPLUS

CN Cyclopropanecarboxamide, N-[7-bromo-2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-

03/07/2006 10748085.trn

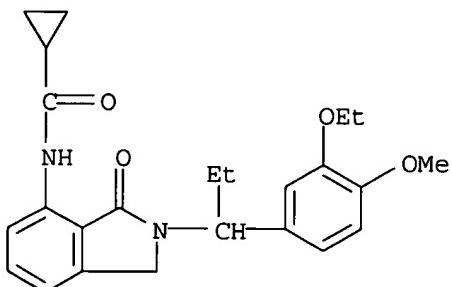
(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



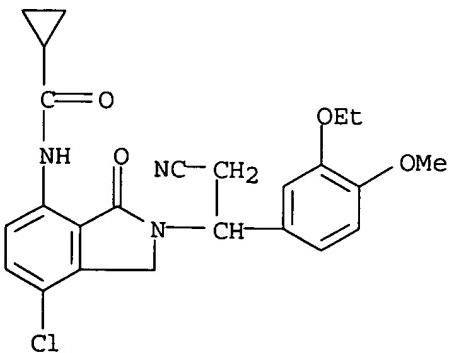
RN 760959-04-4 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)



RN 760959-06-6 HCPLUS

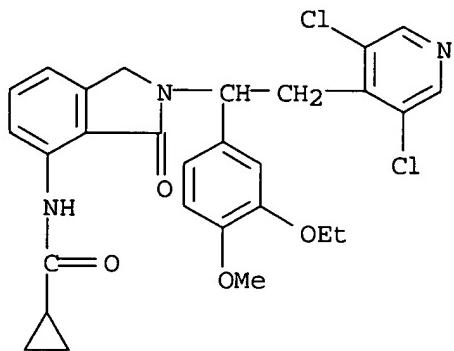
CN Cyclopropanecarboxamide, N-[7-chloro-2-[2-cyano-1-(3-ethoxy-4-methoxyphenyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)



RN 760959-07-7 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[2-(3,5-dichloro-4-pyridinyl)-1-(3-ethoxy-4-methoxyphenyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

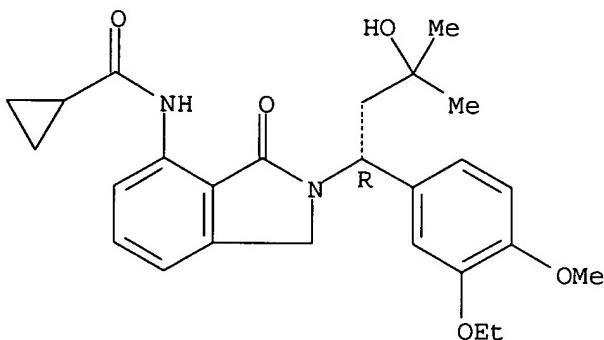
NAME)



RN 760959-09-9 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-hydroxy-3-methylbutyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

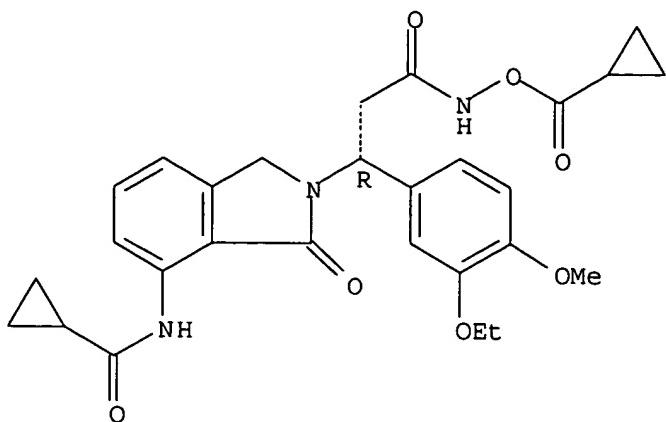
Absolute stereochemistry.



RN 760959-12-4 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]-N-[(cyclopropylcarbonyl)oxy]-β-(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (βR)- (9CI) (CA INDEX NAME)

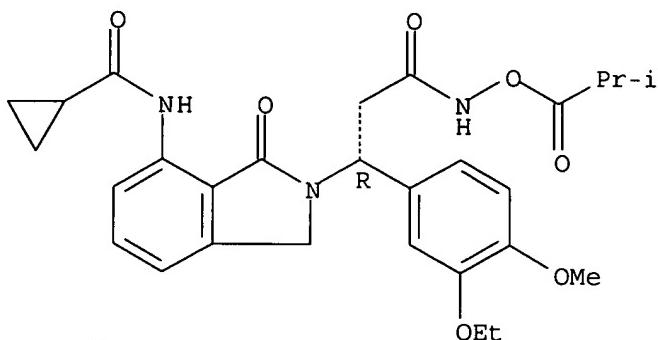
Absolute stereochemistry.



RN 760959-13-5 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-(2-methyl-1-oxopropoxy)-1-oxo-,
(β R) - (9CI) (CA INDEX NAME)

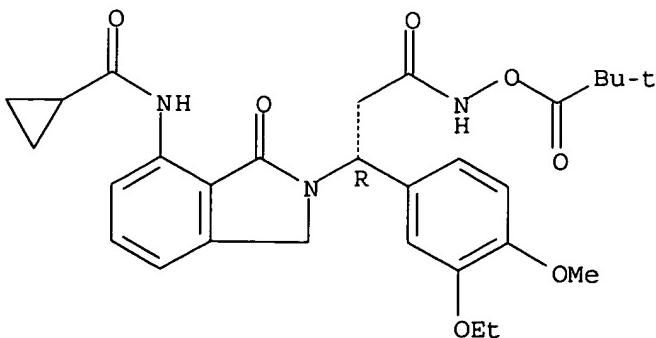
Absolute stereochemistry.



RN 760959-14-6 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]-N-(2,2-dimethyl-1-oxopropoxy)- β - (3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-,
(β R) - (9CI) (CA INDEX NAME)

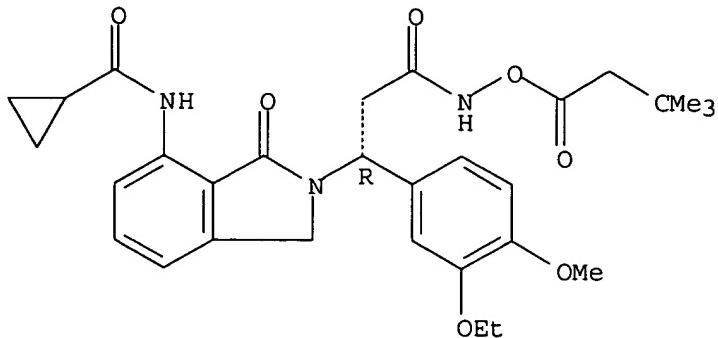
Absolute stereochemistry.



RN 760959-15-7 HCAPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino] -N- (3,3-dimethyl-1-oxobutoxy) - β - (3-ethoxy-4-methoxyphenyl) -1,3-dihydro-1-oxo-, (β R) - (9CI) (CA INDEX NAME)

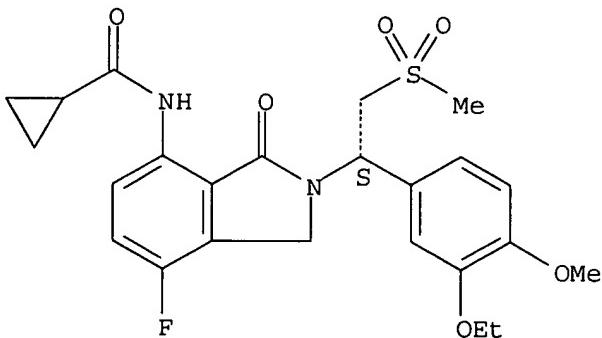
Absolute stereochemistry.



RN 760959-16-8 HCAPLUS

CN Cyclopropanecarboxamide, N- [2- [(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-7-fluoro-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

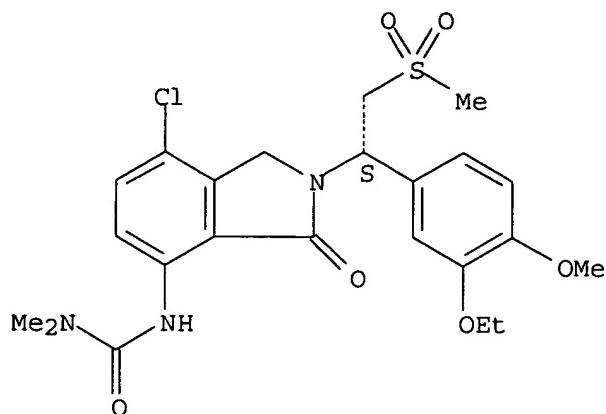
Absolute stereochemistry.



RN 760959-18-0 HCAPLUS

CN Urea, N'-[7-chloro-2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

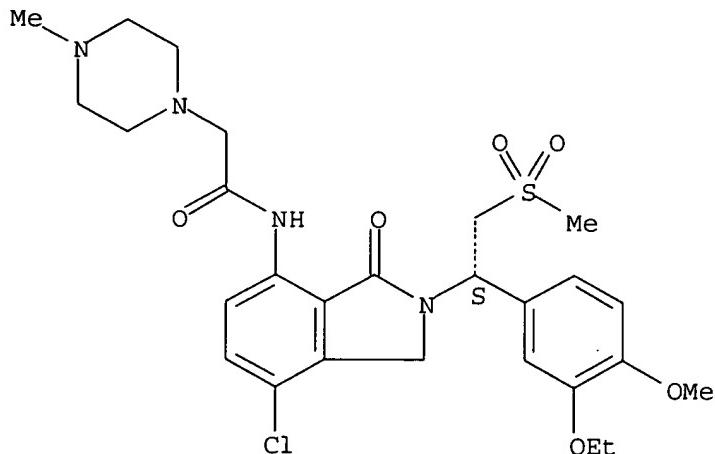
Absolute stereochemistry.



RN 760959-20-4 HCAPLUS

CN 1-Piperazineacetamide, N-[7-chloro-2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-4-methyl- (9CI)
(CA INDEX NAME)

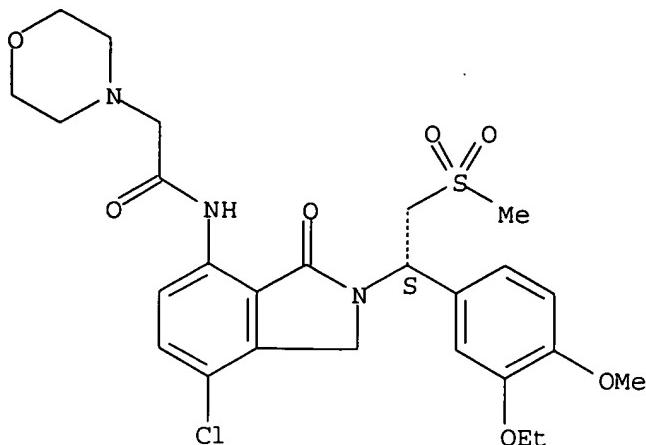
Absolute stereochemistry.



RN 760959-22-6 HCAPLUS

CN 4-Morpholineacetamide, N-[7-chloro-2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

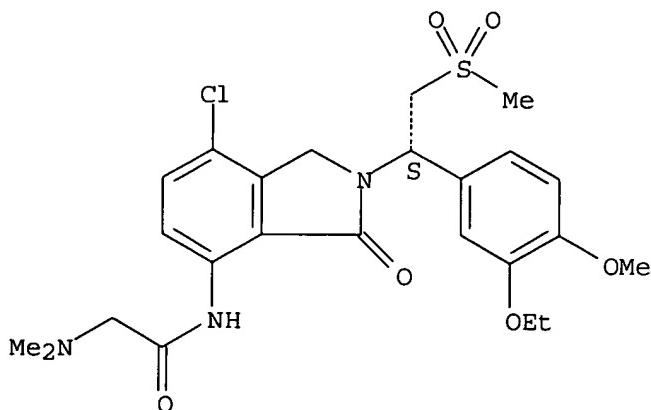


● HCl

RN 760959-23-7 HCPLUS

CN Acetamide, N-[7-chloro-2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-2-(dimethylamino)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

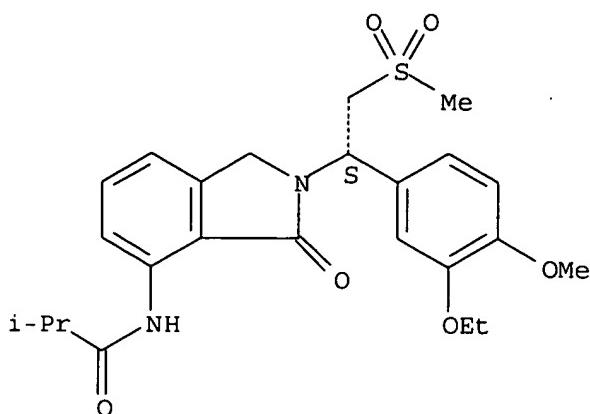


● HCl

RN 760959-24-8 HCPLUS

CN Propanamide, N-[2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



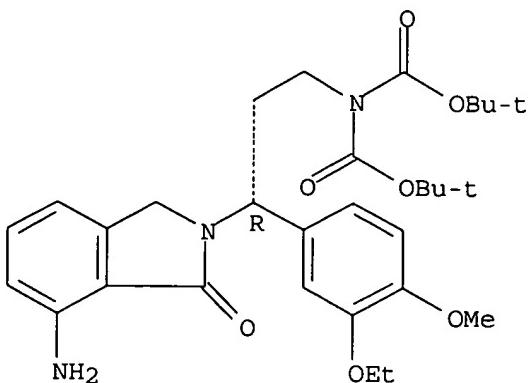
IT 760958-81-4 760958-84-7 760958-89-2
760958-94-9 760959-05-5 760959-19-1
760959-21-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of aminoisoindolone derivs. via heterocyclization of
aminopropanol derivs. and benzoic acid derivs.)

RN 760958-81-4 HCPLUS

CN Imidodicarbonic acid, [(3R)-3-(7-amino-1,3-dihydro-1-oxo-2H-isoindol-2-yl)-
3-(3-ethoxy-4-methoxyphenyl)propyl]-, bis(1,1-dimethylethyl) ester (9CI)
(CA INDEX NAME)

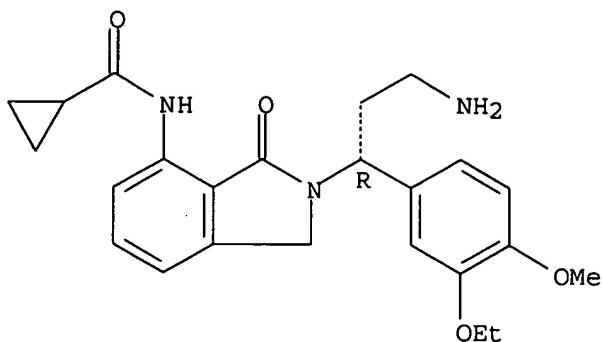
Absolute stereochemistry.



RN 760958-84-7 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-3-amino-1-(3-ethoxy-4-
methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA
INDEX NAME)

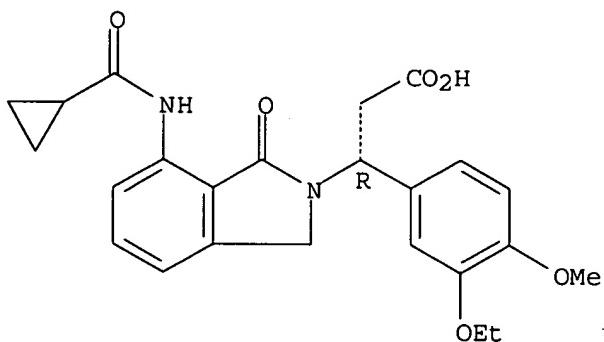
Absolute stereochemistry.



RN 760958-89-2 HCAPLUS

CN 2H-Isoindole-2-propanoic acid, 7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

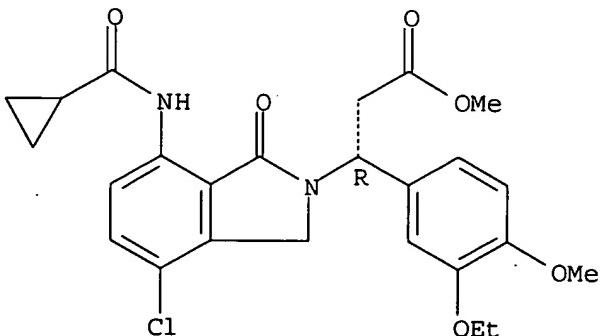
Absolute stereochemistry.



RN 760958-94-9 HCAPLUS

CN 2H-Isoindole-2-propanoic acid, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, methyl ester, (β R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

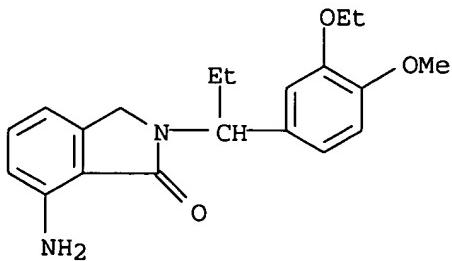


RN 760959-05-5 HCAPLUS

CN 1H-Isoindol-1-one, 7-amino-2-[1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-

03/07/2006 10748085.trn

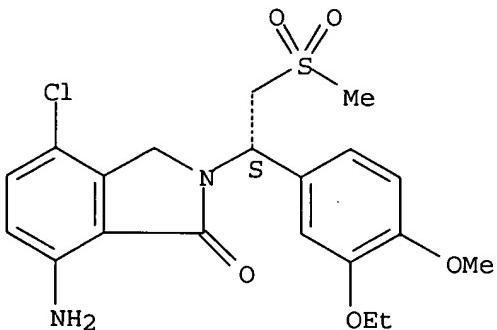
dihydro- (9CI) (CA INDEX NAME)



RN 760959-19-1 HCAPLUS

CN 1H-Isoindol-1-one, 7-amino-4-chloro-2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

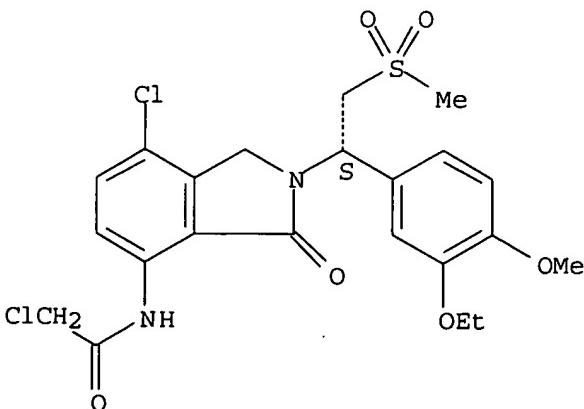
Absolute stereochemistry.



RN 760959-21-5 HCAPLUS

CN Acetamide, 2-chloro-N-[7-chloro-2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 760958-92-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

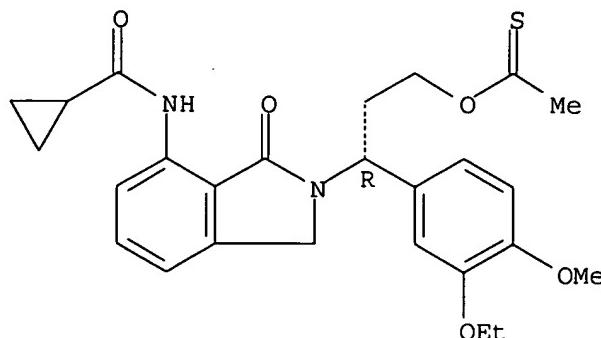
(Reactant or reagent)

(preparation of aminoisoindolone derivs. via heterocyclization of
aminopropanol derivs. and benzoic acid derivs.)

RN 760958-92-7 HCPLUS

CN Ethanethioic acid, O-[(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)propyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 4 OF 8 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:780509 HCPLUS

DOCUMENT NUMBER: 141:295861

TITLE: A preparation of novel isoindolone derivatives, useful
as PDE4 inhibitors

INVENTOR(S): Man, Hon-Wah; Muller, George W.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2004080422 | A2 | 20040923 | WO 2004-US7742 | 20040312 |
| WO 2004080422 | A3 | 20041028 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
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| US 6911464 | B2 | 20050628 | | |
| EP 1606256 | A2 | 20051221 | EP 2004-720480 | 20040312 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |

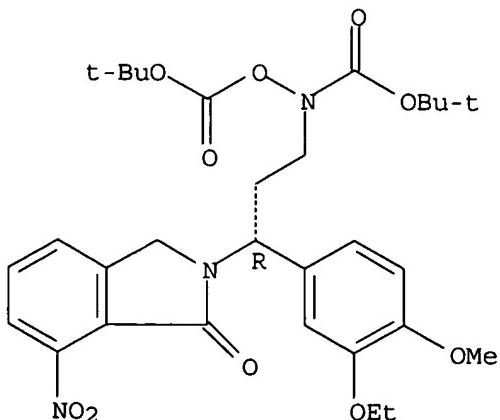
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
 US 2005203090 A1 20050915 US 2005-124280 20050509
 PRIORITY APPLN. INFO.: US 2003-454149P P 20030312
 US 2004-798372 A3 20040312
 WO 2004-US7742 W 20040312

OTHER SOURCE(S) : MARPAT 141:295861
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

- AB The invention relates to a preparation of novel isoindolone derivs. of formula I [wherein: Y is C(O), CH₂, CH₂C(O), or SO₂; R₁ and R₂ are independently selected from (cyclo)alkyl, CF₂H, CF₃, or CH₂CHF₂, etc.; Z₁ is H, alkyl, NH₂, or NH₂, etc.; Z₂ is H or CHO, -C(O)-alkyl, or -C(O)Ph, etc.; X₁, X₂, X₃, and X₄ are independently selected from H, halogen, NO₂, CF₃, alkyl, or alkylimidazolyl, etc.; R₃ and R₄ are independently H or alkyl], useful for treatment or prevention of various diseases and disorders, for example, diseases associated with **PDE4** (no biol. data). For instance, isoindolone derivative II was prepared via amination of N-(hydroxypropyl)isoindolone derivative III by N,O-(tert-butoxycarbonyl)hydroxylamine with a yield of 78%.
- IT 761434-15-5P 761434-16-6P 761434-20-2P
 761434-23-5P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of novel isoindolone derivs. useful as **PDE4** inhibitors)
- RN 761434-15-5 HCPLUS
- CN Carbamic acid, [(3R)-3-(1,3-dihydro-7-nitro-1-oxo-2H-isoindol-2-yl)-3-(3-ethoxy-4-methoxyphenyl)propyl][(1,1-dimethylethoxy)carbonyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

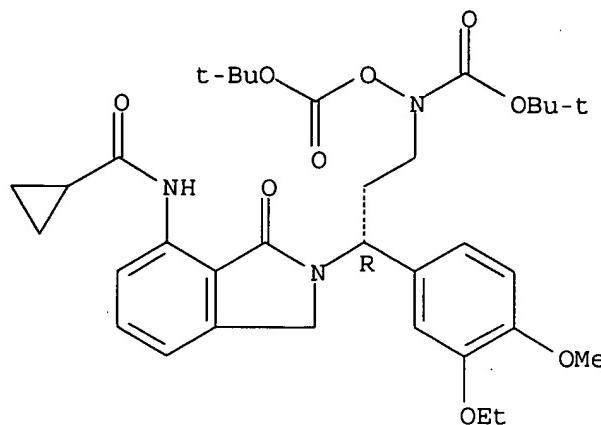
Absolute stereochemistry.



- RN 761434-16-6 HCPLUS
- CN Carbamic acid, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)propyl][(1,1-dimethylethoxy)carbonyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX)

NAME)

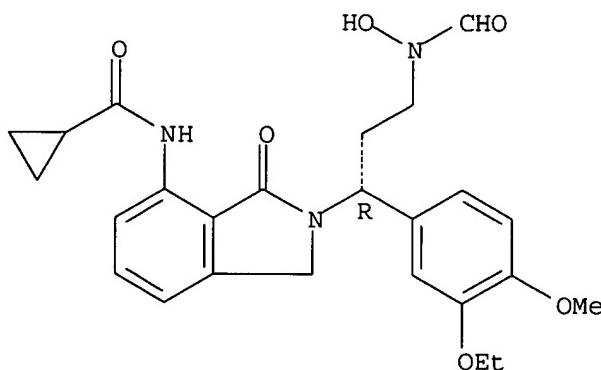
Absolute stereochemistry.



RN 761434-20-2 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(formylhydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI)
(CA INDEX NAME)

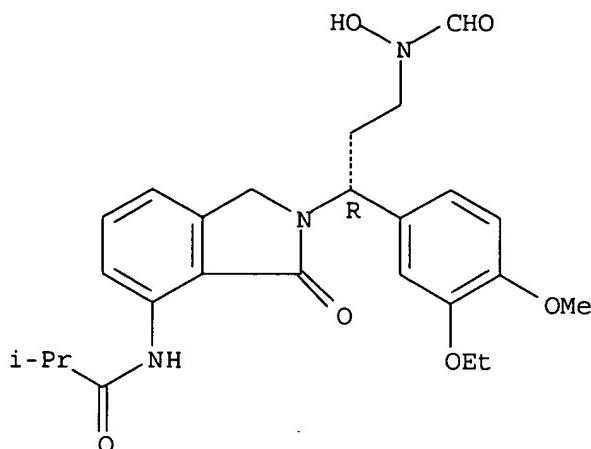
Absolute stereochemistry.



RN 761434-23-5 HCPLUS

CN Propanamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(formylhydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 761434-18-8P 761434-21-3P 761434-27-9P

761434-28-0P 761434-29-1P 761434-30-4P

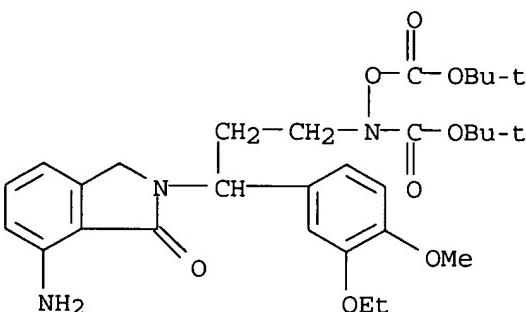
761434-32-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel isoindolone derivs. useful as PDE4 inhibitors)

RN 761434-18-8 HCAPLUS

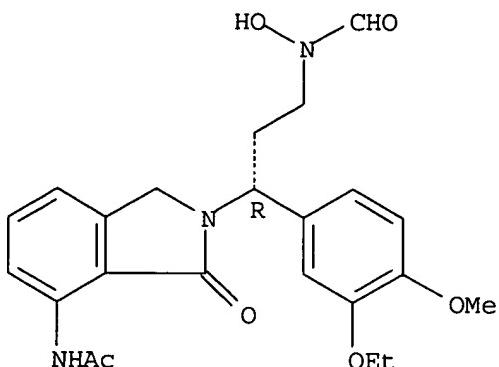
CN Carbamic acid, [3-(7-amino-1,3-dihydro-1-oxo-2H-isoindol-2-yl)-3-(3-ethoxy-4-methoxyphenyl)propyl] [(1,1-dimethylethoxy)carbonyl]oxy] -, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 761434-21-3 HCAPLUS

CN Acetamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(formylhydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

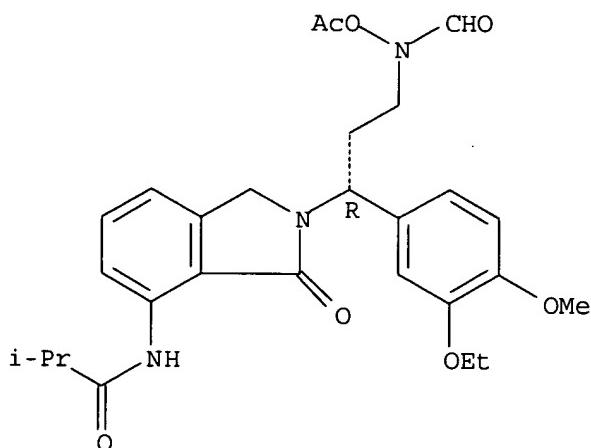
Absolute stereochemistry.



RN 761434-27-9 HCPLUS

CN Propanamide, N-[2-[(1R)-3-[(acetyloxy)formylamino]-1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-2-methyl- (9CI)
(CA INDEX NAME)

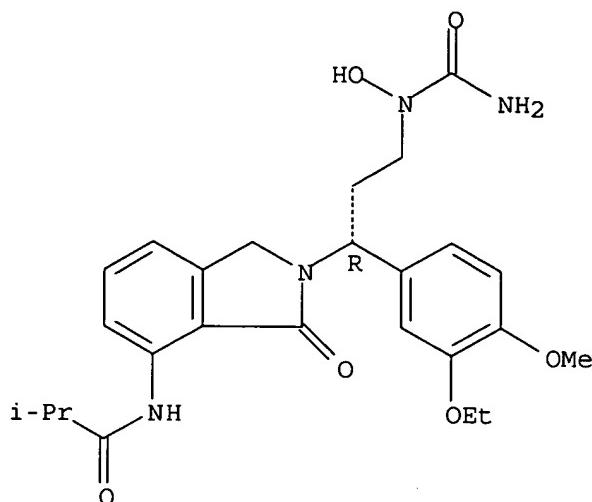
Absolute stereochemistry.



RN 761434-28-0 HCPLUS

CN Propanamide, N-[2-[(1R)-3-[(aminocarbonyl)hydroxyamino]-1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-2-methyl- (9CI)
(CA INDEX NAME)

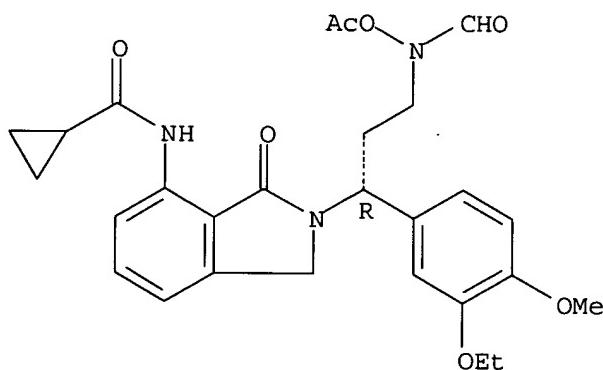
Absolute stereochemistry.



RN 761434-29-1 HCAPLUS

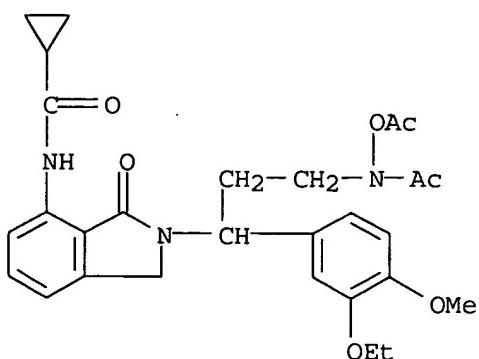
CN Cyclopropanecarboxamide, N-[2-[(1R)-3-[(acetyloxy)formylamino]-1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 761434-30-4 HCAPLUS

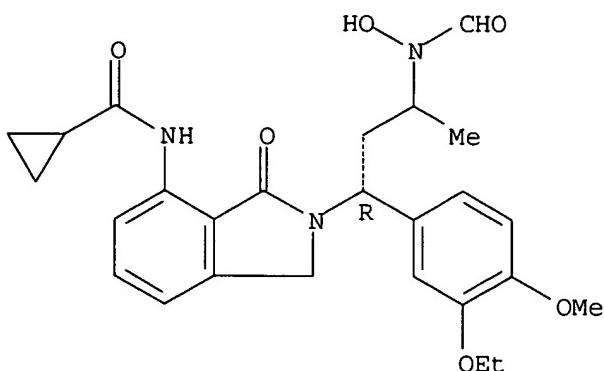
CN Cyclopropanecarboxamide, N-[2-[(3-acetyl(acetyloxy)amino)-1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)



RN 761434-32-6 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(formylhydroxyamino)butyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 761434-17-7 761434-19-9 761434-22-4

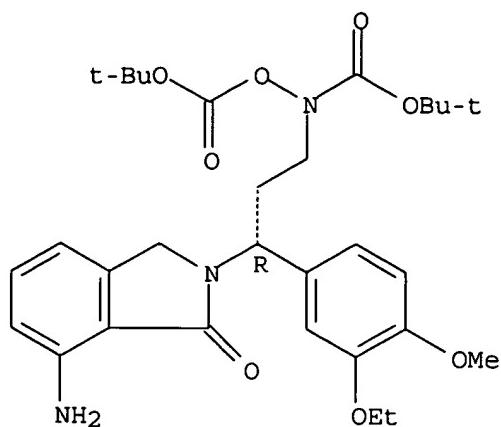
761434-24-6 761434-31-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of novel isoindolone derivs. useful as PDE4 inhibitors)

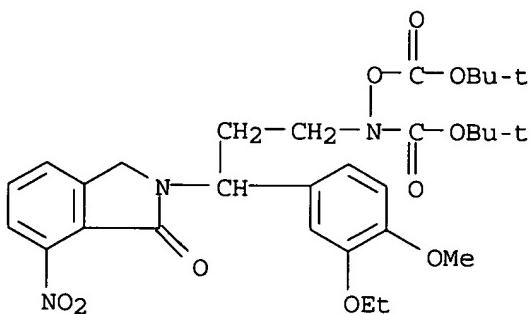
RN 761434-17-7 HCPLUS

CN Carbamic acid, [(3R)-3-(7-amino-1,3-dihydro-1-oxo-2H-isoindol-2-yl)-3-(3-ethoxy-4-methoxyphenyl)propyl]([(1,1-dimethylethoxy)carbonyl]oxy)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

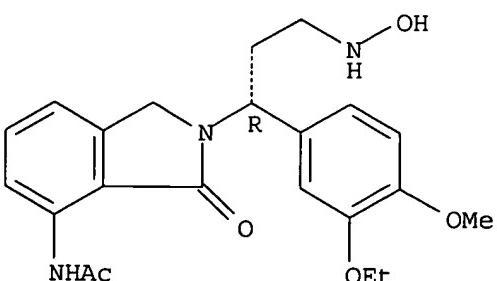


RN 761434-19-9 HCPLUS
 CN Carbamic acid, [3-(1,3-dihydro-7-nitro-1-oxo-2H-isoindol-2-yl)-3-(3-ethoxy-4-methoxyphenyl)propyl]([(1,1-dimethylethoxy)carbonyloxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



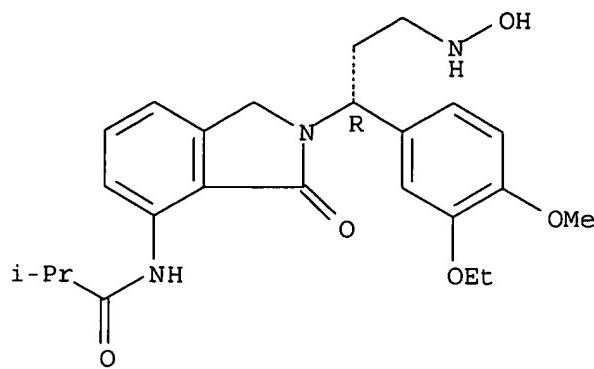
RN 761434-22-4 HCPLUS
 CN Acetamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(hydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



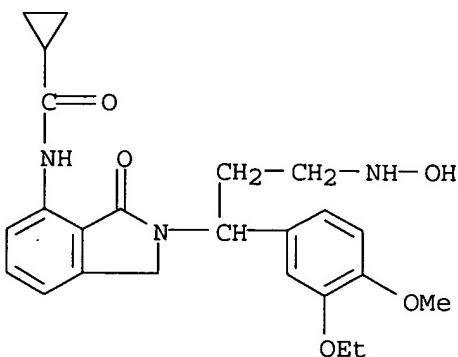
RN 761434-24-6 HCPLUS
 CN Propanamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(hydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 761434-31-5 HCAPLUS

CN Cyclopropanecarboxamide, N-[2-[1-(3-ethoxy-4-methoxyphenyl)-3-(hydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)



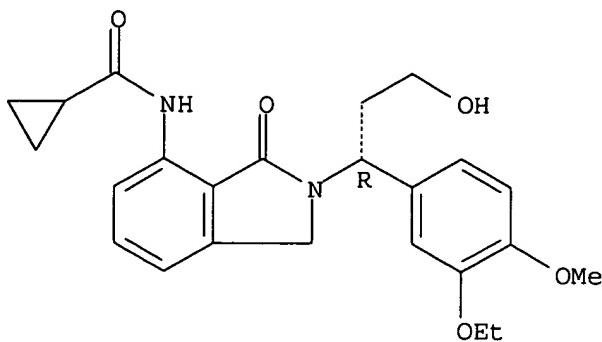
IT 760958-78-9P 760958-82-5P 761434-14-4P
761434-34-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of novel isoindolone derivs. useful as PDE4 inhibitors)

RN 760958-78-9 HCAPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-hydroxypropyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

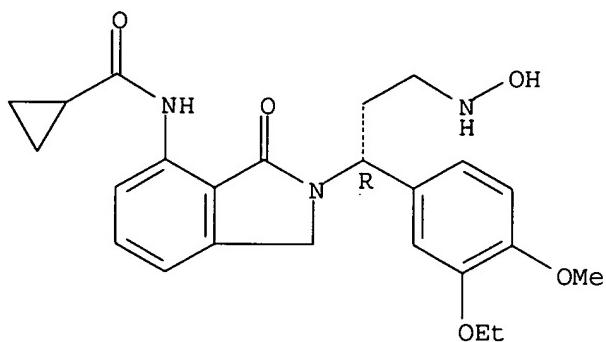
Absolute stereochemistry.



RN 760958-82-5 HCAPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-hydroxyamino]propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

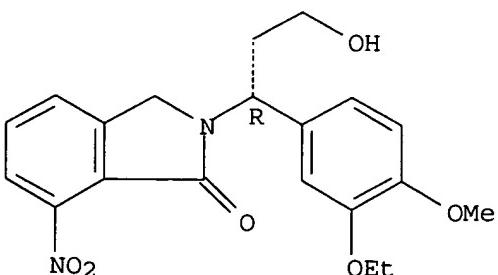
Absolute stereochemistry.



RN 761434-14-4 HCAPLUS

CN 1H-Isoindol-1-one, 2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-hydroxypropyl]-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)

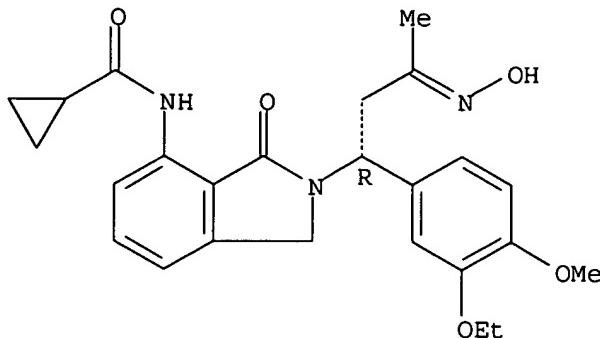
Absolute stereochemistry.



RN 761434-34-8 HCAPLUS

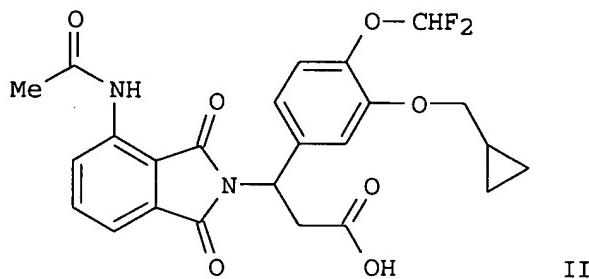
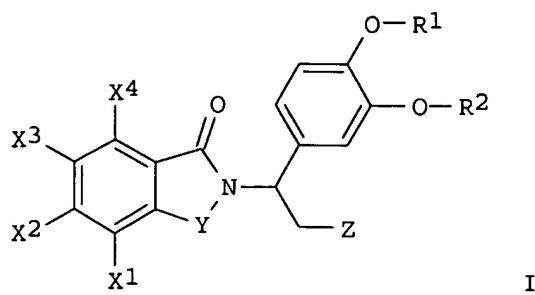
CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-hydroxyimino]butyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



L12 ANSWER 5 OF 8 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:589381 HCPLUS
 DOCUMENT NUMBER: 141:140314
 TITLE: Preparation of 2-(fluoroalkoxyphenylalkyl)-1,3-dihydroisoindolones as PDE4, TNF- α , and/or MMP inhibitors
 INVENTOR(S): Muller, George W.; Man, Hon-Wah; Zhang, Weihong
 PATENT ASSIGNEE(S): Celgene Corporation, USA
 SOURCE: PCT Int. Appl., 98 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--------|------------|-----------------|------------|
| WO 2004060313 | A2 | 20040722 | WO 2003-US41568 | 20031229 |
| WO 2004060313 | A3 | 20050915 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2511843 | AA | 20040722 | CA 2003-2511843 | 20031229 |
| US 2004204448 | A1 | 20041014 | US 2003-748085 | 20031229 |
| EP 1587474 | A2 | 20051026 | EP 2003-808605 | 20031229 |
| EP 1587474 | A3 | 20051102 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| PRIORITY APPLN. INFO.: | | | US 2002-436975P | P 20021230 |
| | | | WO 2003-US41568 | W 20031229 |
| OTHER SOURCE(S): GI | MARPAT | 141:140314 | | |



AB Title compds. I [wherein X1-X4 = independently H, halo, NO₂, NH₂, CF₃, alkyl, cycloalkyl(alkyl), NR₇R₈-(alkyl), R₈CONH-(alkyl), NR₇R₈CONH-(alkyl), R₈OCONH-(alkyl), R₈O-(alkyl), imidazolyl(alkyl), pyrrolyl(alkyl), oxadiazolyl(alkyl), triazolyl(alkyl); or X1 and X2 or X2 and X3 or X3 and X4 may be taken together to form a (hetero)cycloalkyl ring; Y = CO, CH₂, CH₂CO, COCH₂, SO₂; Z = H, COR₃, alkylsulfonyl(alkyl), alkyl, CH₂OH, alkoxy(methyl), CN; R₁ and R₂ = independently CHF₂, alkyl, cycloalkyl(alkyl); at least one of R₁ and R₂ = CHF₂; R₃ = NR₄R₅, alkyl, OH, alkoxy, (un)substituted Ph, PhCH₂; R₄ and R₅ = independently H, alkyl, OH, OCOR₆; R₆ = alkyl(amino), Ph, PhCH₂, aryl; R₇ and R₈ = independently H, alkyl, cycloalkyl(alkyl), NR₇R₈-alkyl, R₈O-alkyl, Ph, PhCH₂, aryl; or pharmaceutically acceptable salts, hydrates, solvates, clathrates, stereoisomers, and prodrugs thereof] were prepared. For example, alkylation of 3,4-dihydroxybenzaldehyde with chlorodifluoromethane in the presence of K₂CO₃ in DMF gave 4-difluoromethoxy-3-hydroxybenzaldehyde (15%), which was further alkylated with bromomethylcyclopropane under the same conditions to afford 3-cyclopropylmethoxy-4-difluoromethoxybenzaldehyde (100%). Reaction of the benzaldehyde with ammonium acetate in 95% EtOH, followed by addition of malonic acid provided 3-amino-3-(3-cyclopropylmethoxy-4-difluoromethoxyphenyl)propionic acid (52%). Condensation of the amine with 3-acetamidophthalic anhydride using sodium acetate in AcOH yielded the isoindoledione II (85%). I and their pharmaceutical compns., optionally in combination with another therapeutic agent, are useful for the treatment or prevention of diseases associated with phosphodiesterase 4 (PDE4) inhibition, abnormal tumor necrosis factor α (TNF- α) levels, and/or matrix metalloproteinase (MMP) inhibition, such as myelodysplastic syndrome, myeloproliferative disease, complex regional pain syndrome, cancer, inflammatory diseases, and autoimmune diseases (no data).

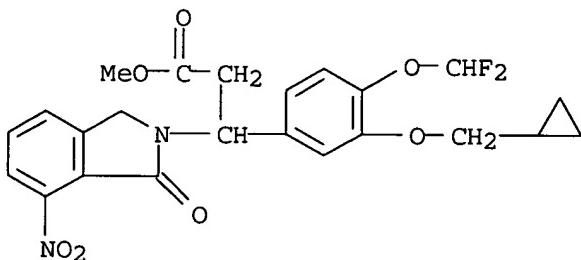
IT **725256-76-8P**, 3-[3-(Cyclopropylmethoxy)-4-difluoromethoxyphenyl]-3-(7-nitro-1-oxo-1,3-dihydroisoindol-2-yl)propionic acid methyl ester
725256-77-9P, 3-[3-(Cyclopropylmethoxy)-4-difluoromethoxyphenyl]-3-(7-nitro-1-oxo-1,3-dihydroisoindol-2-yl)propionic acid

725256-78-0P, 3-[3-(Cyclopropylmethoxy)-4-difluoromethoxyphenyl]-3-(7-nitro-1-oxo-1,3-dihydroisoindol-2-yl)-N,N-dimethylpropionamide
725256-83-7P, 3-[7-(Cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid methyl ester **725256-84-8P**, 3-(7-Amino-1-oxo-1,3-dihydroisoindol-2-yl)-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid methyl ester
725256-85-9P, 3-(7-Acetylamino-1-oxo-1,3-dihydroisoindol-2-yl)-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid methyl ester
725256-86-0P, 3-[7-(Acetylamino)-1-oxo-1,3-dihydroisoindol-2-yl]-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid **725256-87-1P**, 3-[7-(Cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid **725257-12-5P**, 3-[3,4-Bis(difluoromethoxy)phenyl]-3-[7-(cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]propionic acid
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(**PDE4**, TNF- α , and/or MMP inhibitor; preparation of (fluoroalkoxyphenylalkyl)isoindolones as **PDE4**, TNF- α , and/or MMP inhibitors for treatment of inflammatory diseases, autoimmune diseases, cancer, and pain)

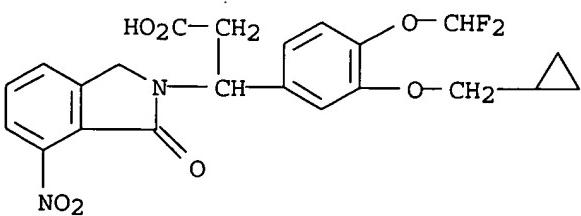
RN 725256-76-8 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -[3-(cyclopropylmethoxy)-4-(difluoromethoxy)phenyl]-1,3-dihydro-7-nitro-1-oxo-, methyl ester (9CI)
(CA INDEX NAME)



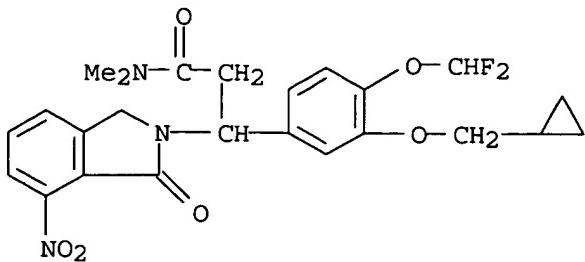
RN 725256-77-9 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -[3-(cyclopropylmethoxy)-4-(difluoromethoxy)phenyl]-1,3-dihydro-7-nitro-1-oxo- (9CI) (CA INDEX NAME)

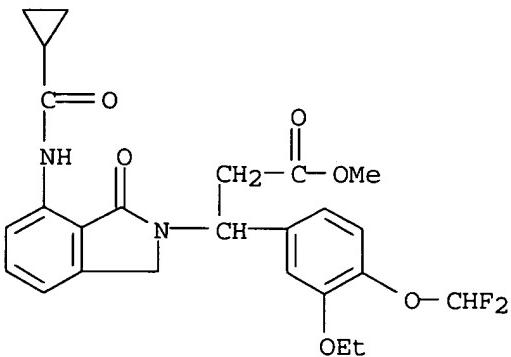


RN 725256-78-0 HCPLUS

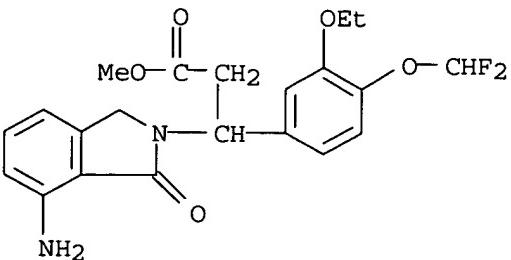
CN 2H-Isoindole-2-propanamide, β -[3-(cyclopropylmethoxy)-4-(difluoromethoxy)phenyl]-1,3-dihydro-N,N-dimethyl-7-nitro-1-oxo- (9CI)
(CA INDEX NAME)



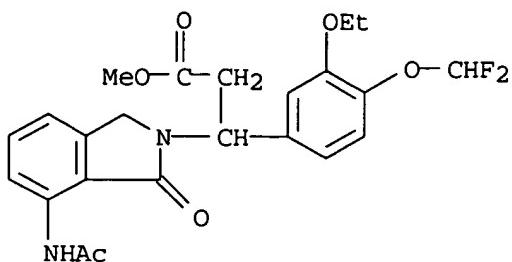
RN 725256-83-7 HCAPLUS
 CN 2H-Isoindole-2-propanoic acid, 7-[(cyclopropylcarbonyl)amino]- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo-, methyl ester (9CI)
 (CA INDEX NAME)



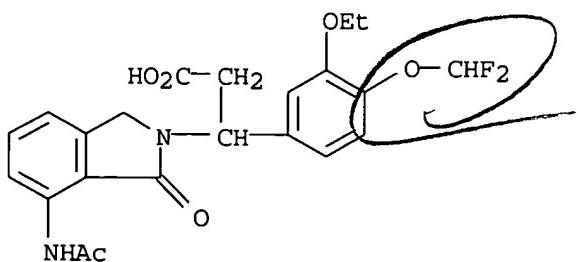
RN 725256-84-8 HCAPLUS
 CN 2H-Isoindole-2-propanoic acid, 7-amino- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



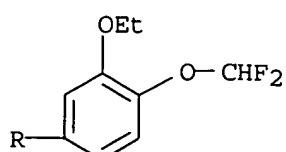
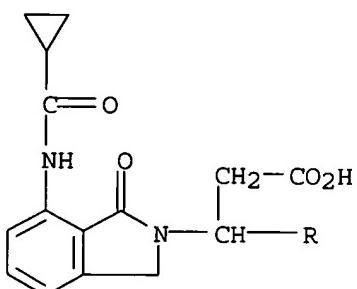
RN 725256-85-9 HCAPLUS
 CN 2H-Isoindole-2-propanoic acid, 7-(acetylamino)- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



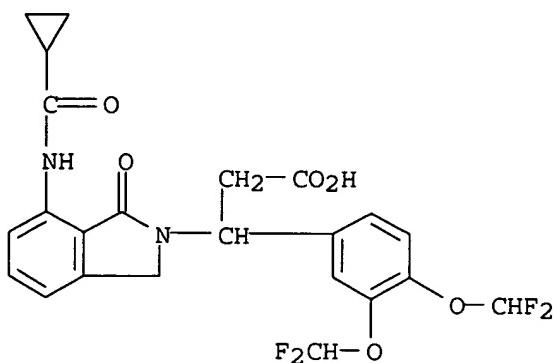
RN 725256-86-0 HCAPLUS
 CN 2H-Isoindole-2-propanoic acid, 7-(acetylamino)- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



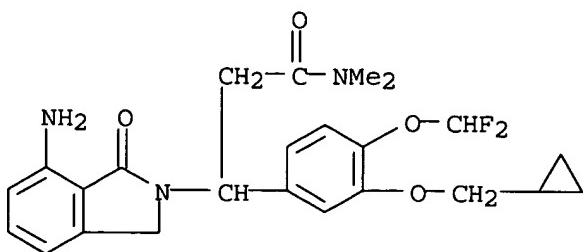
RN 725256-87-1 HCAPLUS
 CN 2H-Isoindole-2-propanoic acid, 7-[(cyclopropylcarbonyl)amino]- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



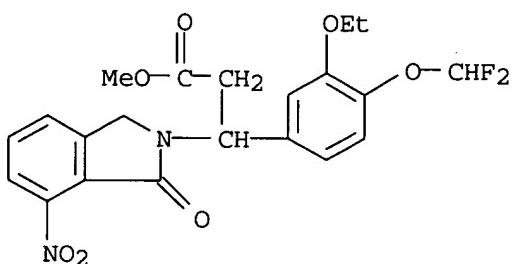
RN 725257-12-5 HCAPLUS
 CN 2H-Isoindole-2-propanoic acid, β -[3,4-bis(difluoromethoxy)phenyl]-7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



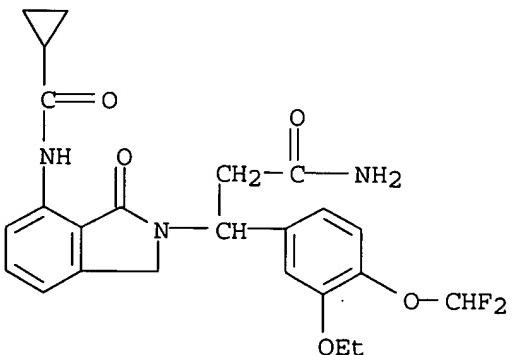
- IT 725256-79-1P, 3-(7-Amino-1-oxo-1,3-dihydroisoindol-2-yl)-3-[3-(cyclopropylmethoxy)-4-difluoromethoxyphenyl]-N,N-dimethylpropionamide
 725256-82-6P, 3-(4-Difluoromethoxy-3-ethoxyphenyl)-3-(7-nitro-1-oxo-1,3-dihydroisoindol-2-yl)propionic acid methyl ester
 725256-88-2P, Cyclopropanecarboxylic acid N-[2-[2-carbamoyl-1-(4-difluoromethoxy-3-ethoxyphenyl)ethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide 725256-89-3P, Cyclopropanecarboxylic acid N-[2-[1-(4-difluoromethoxy-3-ethoxyphenyl)-2-(dimethylcarbamoyl)ethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide 725256-90-6P,
 Cyclopropanecarboxylic acid N-[2-[1-(4-difluoromethoxy-3-ethoxyphenyl)-2-hydroxycarbamoylethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide
 725256-91-7P, 3-(7-Acetylamino-1-oxo-1,3-dihydroisoindol-2-yl)-3-(4-difluoromethoxy-3-ethoxyphenyl)propionamide 725256-92-8P,
 3-(7-Acetylamino-1-oxo-1,3-dihydroisoindol-2-yl)-3-(4-difluoromethoxy-3-ethoxyphenyl)-N,N-dimethylpropionamide 725256-93-9P,
 3-(7-Acetylamino-1-oxo-1,3-dihydroisoindol-2-yl)-3-(4-difluoromethoxy-3-ethoxyphenyl)-N-hydroxypropionamide 725256-99-5P,
 Cyclopropanecarboxylic acid N-[2-[1-(4-difluoromethoxy-3-ethoxyphenyl)-2-(methanesulfonyl)ethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide
 725257-02-3P, Cyclopropanecarboxylic acid N-[2-[2-carbamoyl-1-(4-difluoromethoxy-3-ethoxyphenyl)ethyl]-7-chloro-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide 725257-05-6P, N-[2-[1-(4-Difluoromethoxy-3-ethoxyphenyl)-3-(morpholin-4-yl)-3-oxopropyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]acetamide 725257-08-9P, 3-[3,4-Bis(difluoromethoxy)phenyl]-3-[4-chloro-7-(cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]propionic acid methyl ester 725257-11-4P
 , Cyclopropanecarboxylic acid N-[2-[1-[3,4-bis(difluoromethoxy)phenyl]-2-(dimethylcarbamoyl)ethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide 725257-13-6P, Cyclopropanecarboxylic acid N-[2-[1-[3,4-bis(difluoromethoxy)phenyl]-2-carbamoylethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide 725257-14-7P, Cyclopropanecarboxylic acid N-[2-[1-[3,4-bis(difluoromethoxy)phenyl]-2-hydroxycarbamoylethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (PDE4, TNF- α , and/or MMP inhibitor; preparation of (fluoroalkoxyphenylalkyl)isoindolones as PDE4, TNF- α , and/or MMP inhibitors for treatment of inflammatory diseases, autoimmune diseases, cancer, and pain)
- RN 725256-79-1 HCPLUS
 CN 2H-Isoindole-2-propanamide, 7-amino- β -[3-(cyclopropylmethoxy)-4-(difluoromethoxy)phenyl]-1,3-dihydro-N,N-dimethyl-1-oxo- (9CI) (CA INDEX NAME)



RN 725256-82-6 HCPLUS

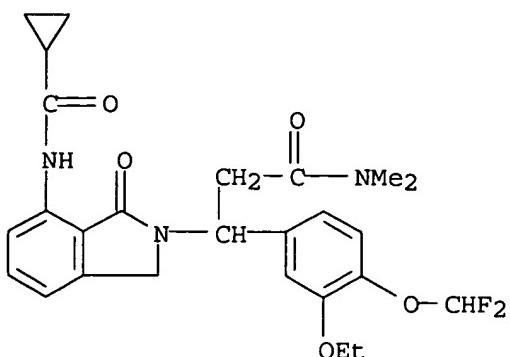
CN 2H-Isoindole-2-propanoic acid, β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-7-nitro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 725256-88-2 HCPLUS

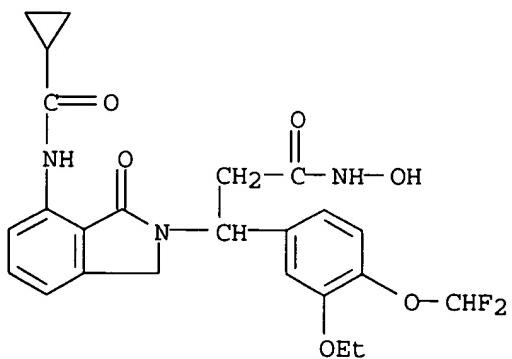
CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

RN 725256-89-3 HCPLUS

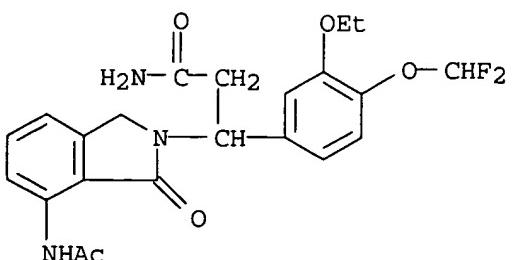
CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-N,N-dimethyl-1-oxo- (9CI) (CA INDEX NAME)



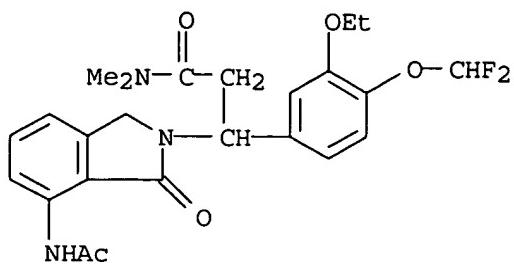
RN 725256-90-6 HCPLUS
CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]-β-[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)



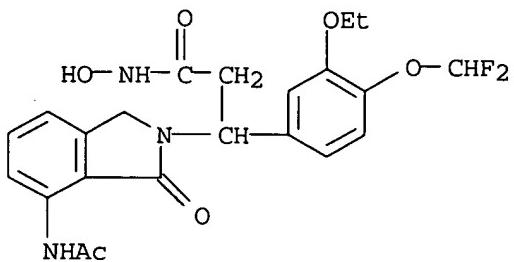
RN 725256-91-7 HCPLUS
CN 2H-Isoindole-2-propanamide, 7-(acetylamino)-β-[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 725256-92-8 HCPLUS
CN 2H-Isoindole-2-propanamide, 7-(acetylamino)-β-[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-N,N-dimethyl-1-oxo- (9CI) (CA INDEX NAME)

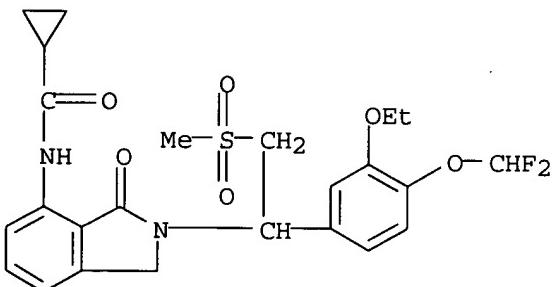


RN 725256-93-9 HCAPLUS

CN 2H-Isoindole-2-propanamide, 7-(acetylamino)- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)

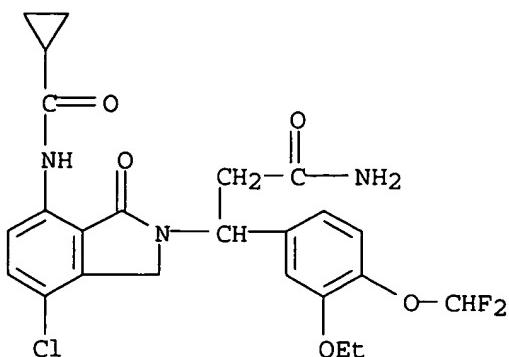
RN 725256-99-5 HCAPLUS

CN Cyclopropanecarboxamide, N-[2-[1-[4-(difluoromethoxy)-3-ethoxyphenyl]-2-(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

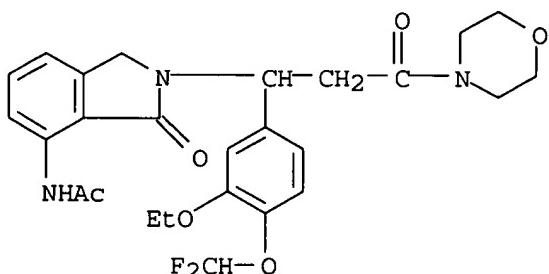


RN 725257-02-3 HCAPLUS

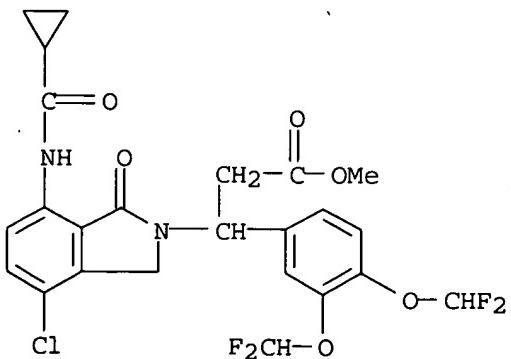
CN 2H-Isoindole-2-propanamide, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



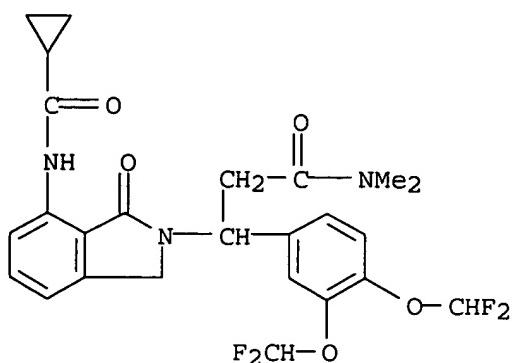
RN 725257-05-6 HCAPLUS
 CN Acetamide, N-[2-[1-[4-(difluoromethoxy)-3-ethoxyphenyl]-3-(4-morpholinyl)-3-oxopropyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)



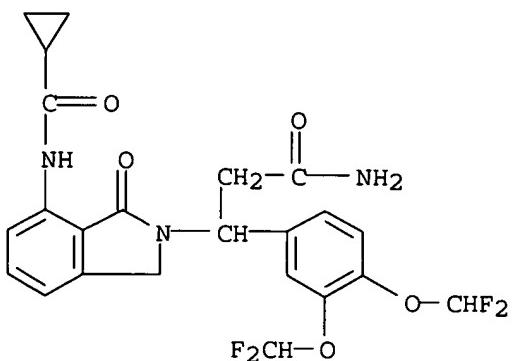
RN 725257-08-9 HCAPLUS
 CN 2H-Isoindole-2-propanoic acid, β-[3,4-bis(difluoromethoxy)phenyl]-4-chloro-7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



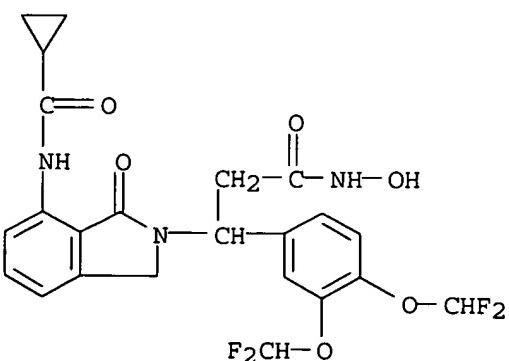
RN 725257-11-4 HCAPLUS
 CN 2H-Isoindole-2-propanamide, β-[3,4-bis(difluoromethoxy)phenyl]-7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-N,N-dimethyl-1-oxo- (9CI) (CA INDEX NAME)



RN 725257-13-6 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -[3,4-bis(difluoromethoxy)phenyl]-7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

RN 725257-14-7 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -[3,4-bis(difluoromethoxy)phenyl]-7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)IT 725257-03-4, 3-[4-Chloro-7-(cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid
725257-15-8, 3-[3,4-Bis(difluoromethoxy)phenyl]-3-[7-

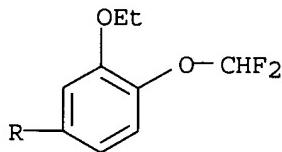
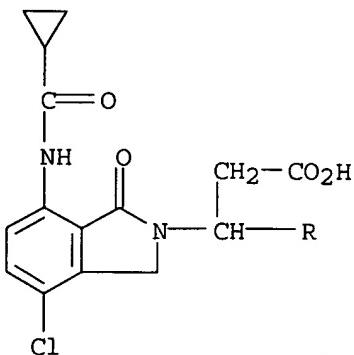
(cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]propionic acid methyl ester

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of (fluoroalkoxyphenylalkyl)isoindolones as PDE4, TNF- α , and/or MMP inhibitors for treatment of inflammatory diseases, autoimmune diseases, cancer, and pain)

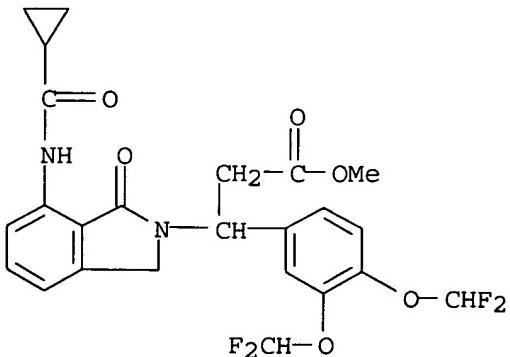
RN 725257-03-4 HCPLUS

CN 2H-Isoindole-2-propanoic acid, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 725257-15-8 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -[3,4-bis(difluoromethoxy)phenyl]-7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



TITLE: Methods of using and compositions comprising
 (-)-3-(3,4-dimethoxy-phenyl)-3-(1-oxo-1,3-dihydro-
 isoindol-2-yl)-propionamide

INVENTOR(S): Muller George W.; Chen, Roger Shen-chu
PATENT ASSIGNEE(S): *Genzyme Corporation, USA*

SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|------------|
| WO 2004054501 | A2 | 20040701 | WO 2003-US36741 | 20031117 |
| WO 2004054501 | A3 | 20040826 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2506442 | AA | 20040701 | CA 2003-2506442 | 20031117 |
| US 2004167199 | A1 | 20040826 | US 2003-715184 | 20031117 |
| EP 1569599 | A2 | 20050907 | EP 2003-789795 | 20031117 |
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| BR 2003016256 | A | 20051004 | BR 2003-16256 | 20031117 |
| CN 1738614 | A | 20060222 | CN 2003-80108901 | 20031117 |
| PRIORITY APPLN. INFO.: | | | US 2002-427380P | P 20021118 |
| | | | WO 2003-US36741 | W 20031117 |

AB Enantiomerically pure (-)-3-(3,4-dimethoxy-phenyl)-3-(1-oxo-1,3-dihydro-isoindol-2-yl)-propionamide (I), prodrugs, metabolites, polymorphs, salts, solvates, and clathrates thereof are described. Methods of treating and/or preventing various diseases and disorders, such as those ameliorated by the reduction of levels of TNF- α or the inhibition of phosphodiesterase 4 (**PDE4**), are also disclosed. For example, I gave an TNF- α IC50 of 3 μ M and 16 μ M in LPS- and IL1 β -induced production of TNF- α , resp.. Also, I showed selectivity for human **PDE4** with IC50 of 4.4 μ M.

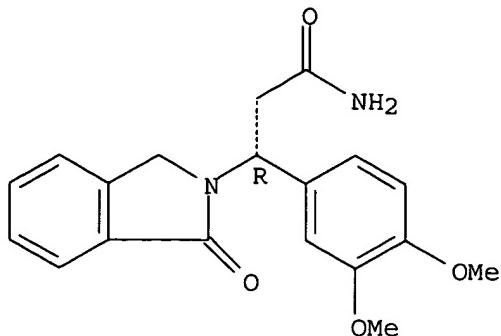
IT 682359-77-9P
RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation, compns. and therapeutic uses of (dimethoxyphenyl)-(oxodihydroisoindolyl)propionamide enantiomer as inhibitor of TNF α and **PDE4**)

RN 682359-77-9 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

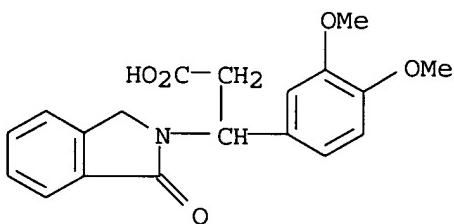
Absolute stereochemistry. Rotation (-).



IT 167886-75-1

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation, compns. and therapeutic uses of (dimethoxyphenyl)-
 (oxodihydroisoindolyl)propionamide enantiomer as inhibitor of
 TNF α and PDE4)

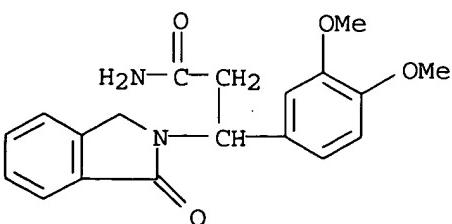
RN 167886-75-1 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β - (3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

IT 167886-76-2P 713513-04-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation, compns. and therapeutic uses of (dimethoxyphenyl)-
 (oxodihydroisoindolyl)propionamide enantiomer as inhibitor of
 TNF α and PDE4)

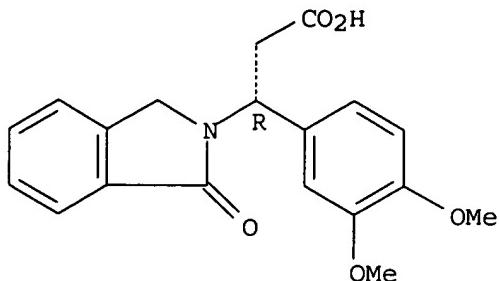
RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β - (3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

RN 713513-04-3 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β - (3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 7 OF 8 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:453020 HCPLUS
 DOCUMENT NUMBER: 141:12309
 TITLE: Compositions comprising (+)-3-(3,4-dimethoxyphenyl)-3-(1-oxo-1,3-dihydroisoindol-2-yl)propionamide
 INVENTOR(S): Muller, George W.; Chen, Roger Shen-chu
 PATENT ASSIGNEE(S): Celgene Corporation, USA
 SOURCE: PCT Int. Appl., 54 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|----------|------------------|------------|
| WO 2004045597 | A1 | 20040603 | WO 2003-US36740 | 20031117 |
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| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2506232 | AA | 20040603 | CA 2003-2506232 | 20031117 |
| AU 2003294311 | A1 | 20040615 | AU 2003-294311 | 20031117 |
| BR 2003016259 | A | 20051004 | BR 2003-16259 | 20031117 |
| EP 1581205 | A1 | 20051005 | EP 2003-789794 | 20031117 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1738613 | A | 20060222 | CN 2003-80108923 | 20031117 |
| PRIORITY APPLN. INFO.: | | | US 2002-427379P | P 20021118 |
| | | | WO 2003-US36740 | W 20031117 |
| AB | Enantiomerically pure (+)-3-(3,4-dimethoxyphenyl)-3-(1-oxo-1,3-dihydroisoindol-2-yl)propionamide (I), and prodrugs, metabolites, polymorphs, salts, solvates (e.g., hydrates), and clathrates are discussed. Methods of treating and/or preventing various diseases and disorders, such as those ameliorated by the reduction of levels of TNF- α or the inhibition of PDE4, are also disclosed. Thus, I was prepared in a series of steps starting from 3,4-dimethoxybenzaldehyde and | | | |

malonic acid. Capsules contained 40.0% I.

IT **682359-78-0P**

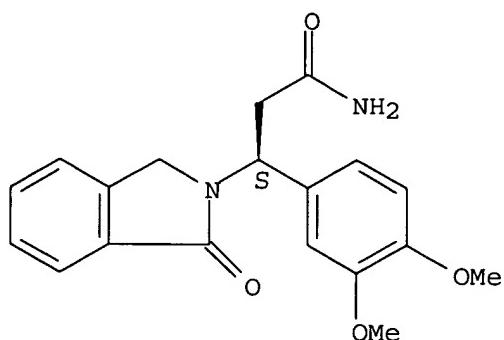
RL: PKT (Pharmacokinetics); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(compns. comprising (dimethoxyphenyl)oxodihydroisoindolylpropionamide)

RN 682359-78-0 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, (β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

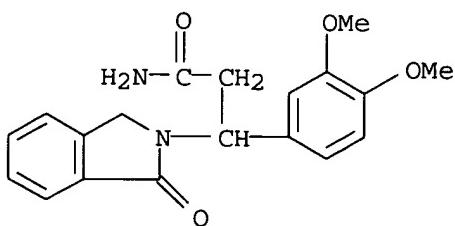


IT **167886-76-2P**

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(compns. comprising (dimethoxyphenyl)oxodihydroisoindolylpropionamide)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



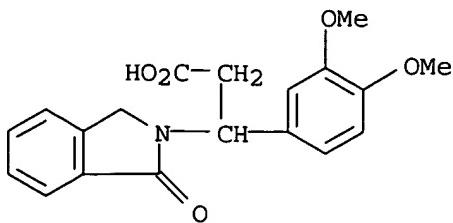
IT **167886-75-1**

RL: RCT (Reactant); RACT (Reactant or reagent)

(compns. comprising (dimethoxyphenyl)oxodihydroisoindolylpropionamide)

RN 167886-75-1 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



IT 696641-78-8P

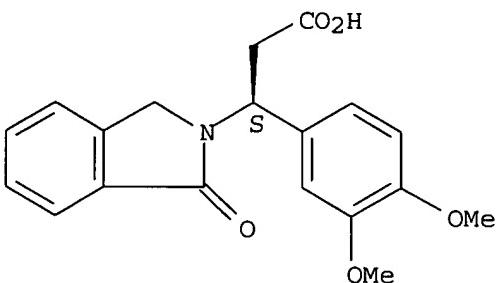
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(compns. comprising (dimethoxyphenyl)oxodihydroisoindolylpropionamide)

RN 696641-78-8 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, (β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 8 OF 8 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:670337 HCPLUS

DOCUMENT NUMBER: 134:157330

TITLE: Thalidomide analogue CC-3052 reduces HIV+ neutrophil apoptosis in vitro

AUTHOR(S): Guckian, M.; Dransfield, I.; Hay, P.; Dalgleish, A. G.

CORPORATE SOURCE: Division of Oncology, St George's Hospital Medical School, London, SW17 ORE, UK

SOURCE: Clinical and Experimental Immunology (2000), 121(3), 472-479

PUBLISHER: CODEN: CEXIAL; ISSN: 0009-9104
Blackwell Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

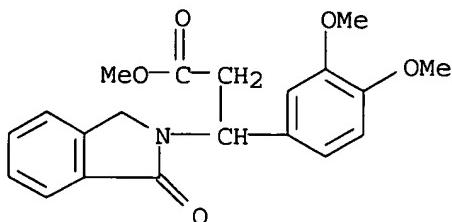
AB Recently, water-soluble analogs of thalidomide with significantly greater immunomodulatory activity and reduced side-effects than thalidomide itself have become available. The effect of thalidomide and one analog, CC-3052, on neutrophil apoptosis was examined following culture for 20 h in vitro. Apoptosis was assessed by measuring reduced CD16 expression and Annexin V binding by flow cytometry. Neither thalidomide nor CC-3052 alone had any effect on neutrophil apoptosis when used at physiol. concns. However, when used together with PGE2 (10⁻⁷M), a potent adenylate cyclase activator, CC-3052 but not thalidomide (both 10⁻⁵M) reduced apoptosis in neutrophils from normal and HIV+ donors. The reduced apoptosis could not be attributed to the ability of CC-3052 to reduce tumor necrosis

factor- α (TNF- α) production, but may have been due to its PDE4 inhibitor properties, as it increased intracellular cAMP and mimicked the effect of dibutyryl cAMP, a membrane-permeable analog of cAMP, in increasing intracellular cAMP. The results suggest a role for thalidomide analog CC-3052 in reducing the persistent activation of the TNF- α system in HIV+ patients without markedly impairing neutrophil viability.

IT 216884-02-5, CC 3052

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(thalidomide analog CC-3052 reduction of apoptosis by neutrophils from HIV-pos. humans)

RN 216884-02-5 HCAPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 14:06:55 ON 07 MAR 2006)

FILE 'REGISTRY' ENTERED AT 14:07:10 ON 07 MAR 2006

| | |
|----|--------------------|
| L1 | STRUCTURE UPLOADED |
| L2 | 3 S L1 |
| L3 | 115 S L1 SSS FULL |
| L4 | STRUCTURE UPLOADED |
| L5 | 4 S L4 |
| L6 | 149 S L4 SSS FULL |

FILE 'CAPLUS' ENTERED AT 14:10:38 ON 07 MAR 2006

| | |
|----|---------|
| L7 | 39 S L3 |
| | S L4 |

FILE 'REGISTRY' ENTERED AT 14:10:56 ON 07 MAR 2006

| | |
|----|--------|
| L8 | 4 S L4 |
|----|--------|

FILE 'CAPLUS' ENTERED AT 14:10:57 ON 07 MAR 2006

| | |
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| L9 | 3 S L8 |
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FILE 'HCAPLUS' ENTERED AT 14:11:15 ON 07 MAR 2006

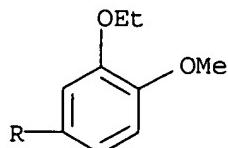
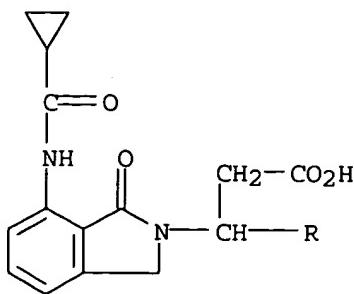
| | |
|-----|------------------|
| L10 | 39 S L3 |
| L11 | 41 S L6 |
| L12 | 8 S L11 AND PDE4 |

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L10 ANSWER 1 OF 39 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2006:100917 HCAPLUS
 DOCUMENT NUMBER: 144:177424
 TITLE: Novel isoindoline compounds and methods of their use
 in treating and preventing cancer
 INVENTOR(S): Muller, George W.; Man, Hon-Wah
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 28 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 2006025457 | A1 | 20060202 | US 2004-900332 | 20040728 |
| WO 2006015060 | A2 | 20060209 | WO 2005-US26679 | 20050727 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM | | | | |

- PRIORITY APPLN. INFO.: US 2004-900332 A 20040728
- AB The present invention relates to novel isoindoline compds. and pharmaceutically acceptable salts, solvates, prodrugs, and stereoisomers thereof and methods of treating and preventing cancer. Specifically, the invention relates to isoindoline compds. and methods of using the compds. in treating, preventing and/or managing cancer, diseases and disorders associated with, or characterized by, undesired angiogenesis, and diseases and disorders mediated by PDE 4, using the compds.
- IT 874760-81-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (novel isoindoline compds. and methods of their use in treating and preventing cancer)
- RN 874760-81-3 HCPLUS
 CN INDEX NAME NOT YET ASSIGNED



L10 ANSWER 2 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:1259318 HCPLUS
 DOCUMENT NUMBER: 144:583
 TITLE: Methods and compositions using selective cytokine inhibitory drugs for treatment and management of cancers and other diseases
 INVENTOR(S): Zeldis, Jerome B.
 PATENT ASSIGNEE(S): Celgene Corporation, USA
 SOURCE: PCT Int. Appl., 89 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2005112918 | A1 | 20051201 | WO 2004-US14002 | 20040505 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |

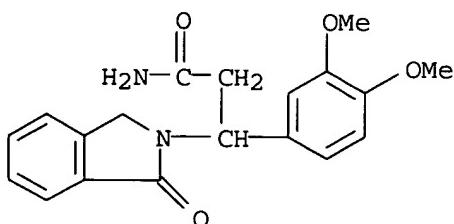
PRIORITY APPLN. INFO.: WO 2004-US14002 20040505
 OTHER SOURCE(S): MARPAT 144:583
 AB Methods of treating, preventing and/or managing cancer as well as and diseases and disorders associated with, or characterized by, undesired angiogenesis are disclosed. Specific methods encompass the administration of a selective cytokine inhibitory drug alone or in combination with a second active ingredient. The invention further relates to methods of reducing or avoiding adverse side effects associated with chemotherapy,

radiation therapy, hormonal therapy, biol. therapy or immunotherapy which comprise the administration of a selective cytokine inhibitory drug. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed.

IT 167886-76-2

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cytokine inhibitors for treatment and management of cancers and other diseases)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-(9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1259275 HCPLUS

DOCUMENT NUMBER: 144:582

TITLE: Methods of using, and compositions comprising, selective cytokine inhibitory drugs for the treatment and management of myeloproliferative diseases

INVENTOR(S): Zeldis, Jerome B.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------------|-----------------|----------|
| WO 2005112917 | A1 | 20051201 | WO 2004-US14001 | 20040505 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| PRIORITY APPLN. INFO.: | | | WO 2004-US14001 | 20040505 |
| OTHER SOURCE(S): | | MARPAT 144:582 | | |
| AB | Methods of treating, preventing, and/or managing a myeloproliferative | | | |

disease are disclosed. Specific methods encompass the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent, and/or the transplantation of blood or cells. Particular second active agent is capable of suppressing the overprodn. of hematopoietic stem cells or ameliorating one or more of the symptoms of MPD. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed.

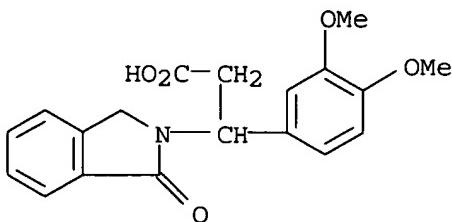
IT 167886-75-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cytokine inhibitors, alone or in combination with other agents, for treatment of myeloproliferative diseases)

RN 167886-75-1 HCAPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 39 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1240579 HCAPLUS

DOCUMENT NUMBER: 143:472631

TITLE: Method of using and compositions comprising selective cytokine inhibitory drugs for the treatment and management of myelodysplastic syndromes

INVENTOR(S): Zeldis, Jerome B.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

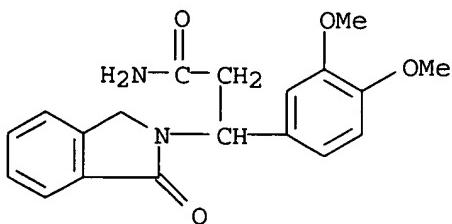
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2005110085 | A2 | 20051124 | WO 2004-US11635 | 20040414 |
| WO 2005110085 | A3 | 20060209 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, | | | | |

SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG

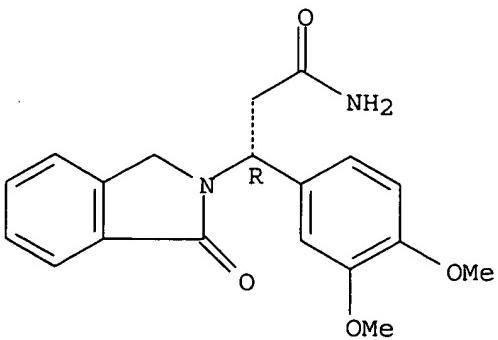
PRIORITY APPLN. INFO.: WO 2004-US11635 20040414
 OTHER SOURCE(S): MARPAT 143:472631
 AB Methods for treating, preventing and/or managing a myelodysplastic syndrome are disclosed. Specific methods encompass the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active ingredient, and/or blood or cells for transplantation therapy. Specific second active ingredients are capable of affecting or improving blood cell production Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed.

IT 167886-76-2 682359-77-9 682359-78-0
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cytokine inhibitors for treatment of myelodysplastic syndromes, and use with other agents)
 RN 167886-76-2 HCPLUS
 CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



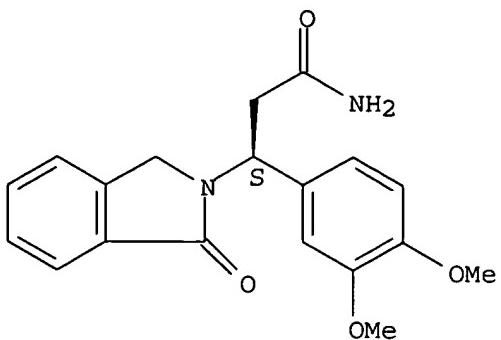
RN 682359-77-9 HCPLUS
 CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 682359-78-0 HCPLUS
 CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, (β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L10 ANSWER 5 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:1155544 HCPLUS
 DOCUMENT NUMBER: 143:416245
 TITLE: Methods of using, and compositions comprising, phosphodiesterase 4 (PDE4) modulators for the treatment and management of pulmonary hypertension
 INVENTOR(S): Zeldis, Jerome B.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 33 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 2005239867 | A1 | 20051027 | US 2005-111187 | 20050421 |
| WO 2005102317 | A1 | 20051103 | WO 2005-US13597 | 20050421 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG | | | | |

PRIORITY APPLN. INFO.: US 2004-565174P P 20040423

OTHER SOURCE(S): MARPAT 143:416245

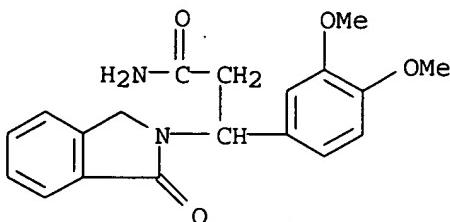
AB Methods of treating, preventing, and managing pulmonary hypertension are disclosed. Specific methods encompass the administration of a PDE4 modulator, or a pharmaceutically acceptable salt, solvate (e.g., hydrate), stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent, surgery and/or lung transplantation. Specific second active agents are capable of reducing pulmonary artery pressure. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed.

IT 167886-76-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(phosphodiesterase 4 modulators for treatment of pulmonary hypertension)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-(9CI) (CA INDEX NAME)

L10 ANSWER 6 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:451120 HCPLUS

DOCUMENT NUMBER: 142:476229

TITLE: Methods of using and compositions comprising PDE4 modulators for the treatment and management of asbestos-related diseases and disorders

INVENTOR(S): Zeldis, Jerome B.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

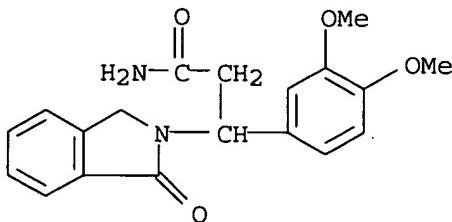
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2005046592 | A2 | 20050526 | WO 2004-US37082 | 20041104 |
| WO 2005046592 | A3 | 20051215 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2005142104 | A1 | 20050630 | US 2004-981190 | 20041103 |
| PRIORITY APPLN. INFO.: | | | US 2003-518603P | P 20031106 |

OTHER SOURCE(S): MARPAT 142:476229

AB Methods of treating, preventing and managing an asbestos-related disease or disorder are disclosed. Specific embodiments encompass the administration of a PDE4 modulator, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent and/or chemotherapy, surgery, or radiation therapy. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in the methods of the invention are also disclosed. Treatment with 400 mg 3-(3,4-dimethoxyphenyl)-3-(1-oxo-1,3-dihydroisoindol-

2-yl)propionamide as a continuous oral daily dose is well-tolerated.
 IT 167886-76-2
 RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (as PDE4 modulator; PDE4 modulators and compns. for treatment and
 management of asbestos-related diseases and disorders)
 RN 167886-76-2 HCPLUS
 CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-
 (9CI) (CA INDEX NAME)



L10 ANSWER 7 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:426388 HCPLUS
 DOCUMENT NUMBER: 142:457121
 TITLE: Methods of using and compositions comprising selective cytokine inhibitory drug for treatment, modification and management of pain
 INVENTOR(S): Zeldis, Jerome B.; Faleck, Herbert; Manning, Donald C.
 PATENT ASSIGNEE(S): Celgene Corporation, USA
 SOURCE: PCT Int. Appl., 85 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 2005043971 | A2 | 20050519 | WO 2004-US12722 | 20040423 |
| WO 2005043971 | A3 | 20050714 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG | | | | |
| US 2005203142 | A1 | 20050915 | US 2003-693794 | 20031023 |
| PRIORITY APPLN. INFO.: | | | US 2003-693794 | A 20031023 |
| | | | US 2002-421003P | P 20021024 |

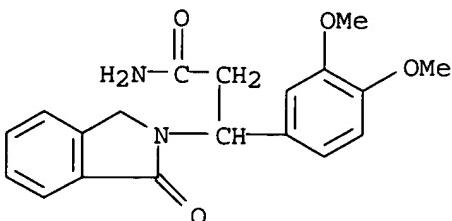
OTHER SOURCE(S): MARPAT 142:457121
 AB Methods of treating, preventing, modifying and managing various types of pain are disclosed. Specific methods comprise the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt,

solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent and/or surgery, psychol. or phys. therapy. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed.

IT 167886-76-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cytokine inhibitors, alone or in combination with other agents, for treatment of pain)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

L10 ANSWER 8 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:780510 HCPLUS

DOCUMENT NUMBER: 141:277486

TITLE: A preparation of 7-aminoisoindolone derivatives

INVENTOR(S): Man, Hon-Wah; Muller, George W.; Zhang, Weihong

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 109 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

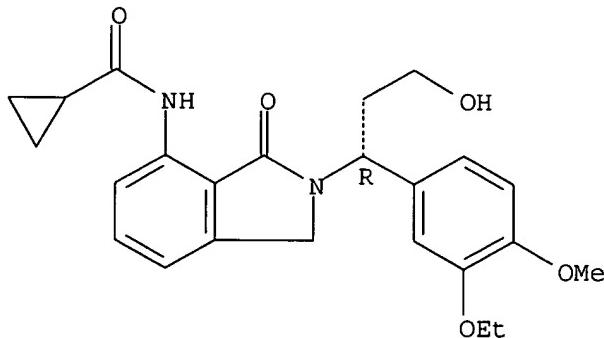
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 2004080423 | A2 | 20040923 | WO 2004-US7743 | 20040312 |
| WO 2004080423 | A3 | 20041104 | | |
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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG | | | | |
| CA 2518584 | AA | 20040923 | CA 2004-2518584 | 20040312 |
| US 2004254214 | A1 | 20041216 | US 2004-798317 | 20040312 |
| EP 1605896 | A2 | 20051221 | EP 2004-720448 | 20040312 |
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| PRIORITY APPLN. INFO.: | | | US 2003-454155P | P 20030312 |

OTHER SOURCE(S) : MARPAT 141:277486
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

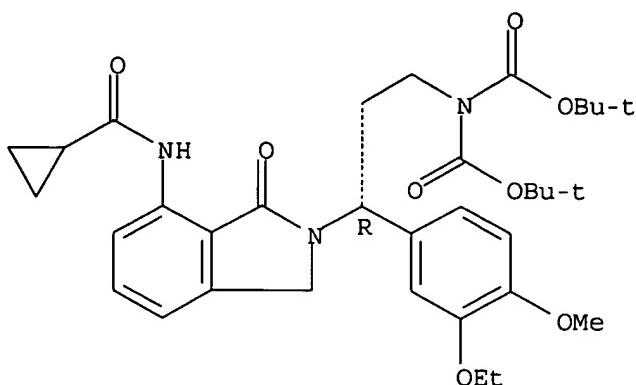
- AB The invention relates to a preparation of 7-aminoisoindole derivs. of formula I [wherein: Y is C(O), CH₂, CH₂C(O), or SO₂; X is H; Z is -alkyl-CO₂H, alkyl, -alkyl-OH, or -alkyl-NH₂, etc.; R₁ and R₂ are independently selected from (cyclo)alkyl or -alkyl-cycloalkyl], useful for treatment, prevention or management of cancer, inflammatory bowel disease, and myelodysplastic syndrome, etc. (no biol. data). For instance, isoindole derivative II was prepared via heterocyclization of aminopropanol derivative III and benzoic acid derivative IV with a yield of 64% (example 1).
- IT 760958-78-9P 760958-80-3P 760958-88-1P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of aminoisoindolone derivs. via heterocyclization of aminopropanol derivs. and benzoic acid derivs.)
- RN 760958-78-9 HCPLUS
- CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-hydroxypropyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- RN 760958-80-3 HCPLUS
- CN Imidodicarbonic acid, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)propyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

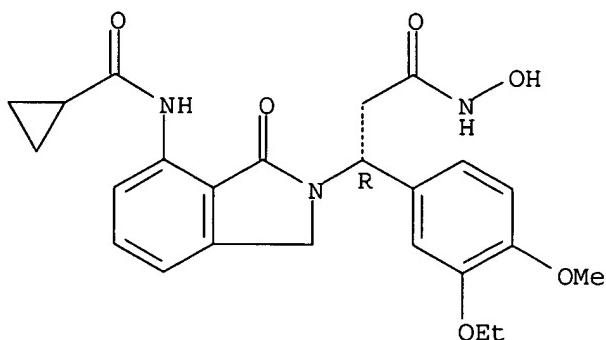
Absolute stereochemistry.



RN 760958-88-1 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]-β-(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-hydroxy-1-oxo-, (βR)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



IT 760958-82-5P 760958-83-6P 760958-85-8P

760958-86-9P 760958-87-0P 760958-90-5P

760958-91-6P 760958-93-8P 760958-96-1P

760958-97-2P 760958-98-3P 760958-99-4P

760959-04-4P 760959-06-6P 760959-09-9P

760959-12-4P 760959-13-5P 760959-14-6P

760959-15-7P

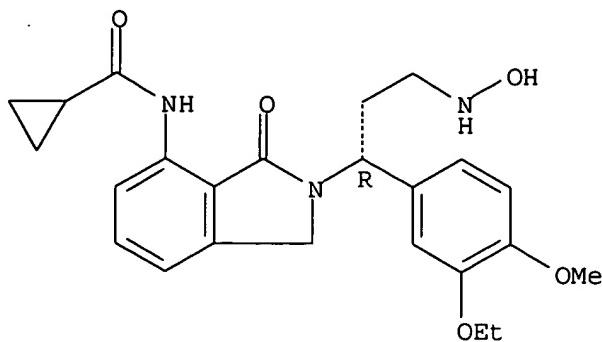
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminoisoindolone derivs. via heterocyclization of aminopropanol derivs. and benzoic acid derivs.)

RN 760958-82-5 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(hydroxymino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

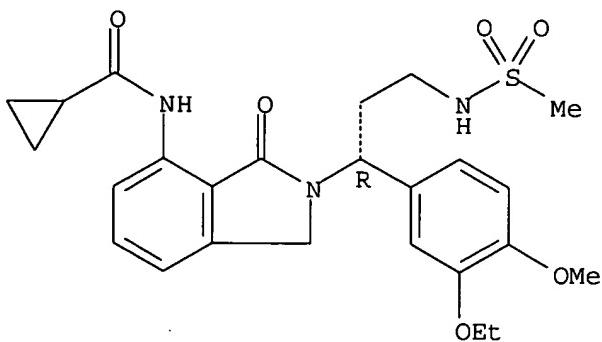
Absolute stereochemistry.



RN 760958-83-6 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-[(methylsulfonyl)amino]propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

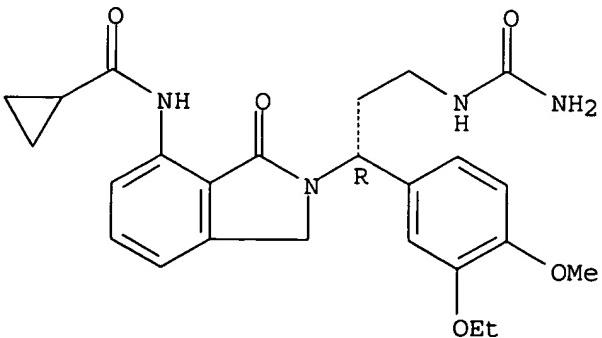
Absolute stereochemistry.



RN 760958-85-8 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-3-[(aminocarbonyl)amino]-1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

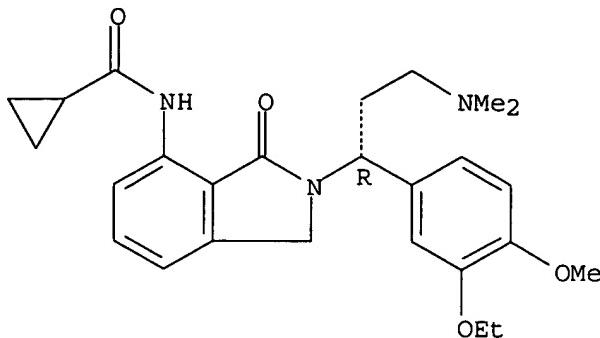


RN 760958-86-9 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-3-(dimethylamino)-1-(3-ethoxy-4-

methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-,
monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

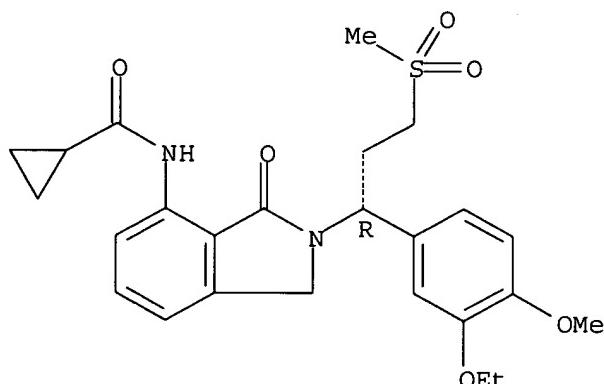


● HCl

RN 760958-87-0 HCAPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(methylsulfonyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

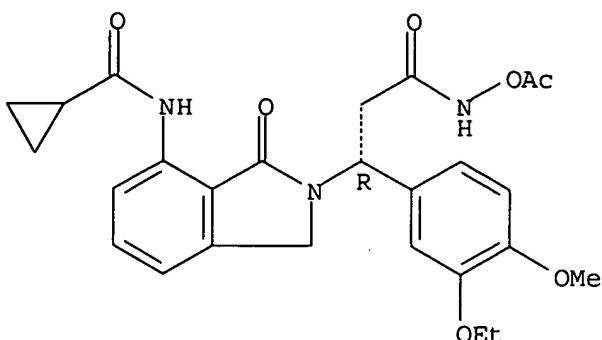
Absolute stereochemistry.



RN 760958-90-5 HCAPLUS

CN 2H-Isoindole-2-propanamide, N-(acetyloxy)-7-[(cyclopropylcarbonyl)amino]-
β-(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (βR)- (9CI)
(CA INDEX NAME)

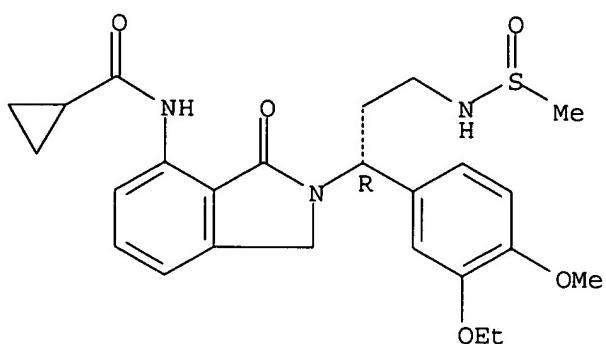
Absolute stereochemistry.



RN 760958-91-6 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-[(methylsulfinyl)amino]propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI)
(CA INDEX NAME)

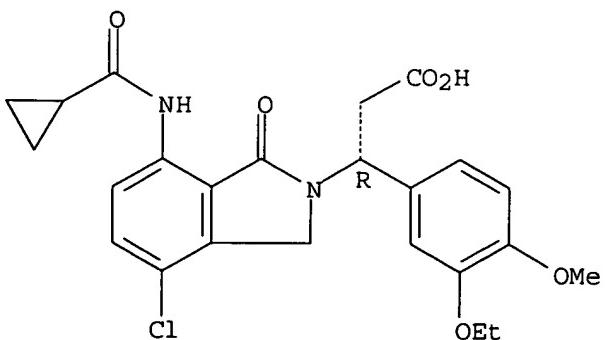
Absolute stereochemistry.



RN 760958-93-8 HCPLUS

CN 2H-Isoindole-2-propanoic acid, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

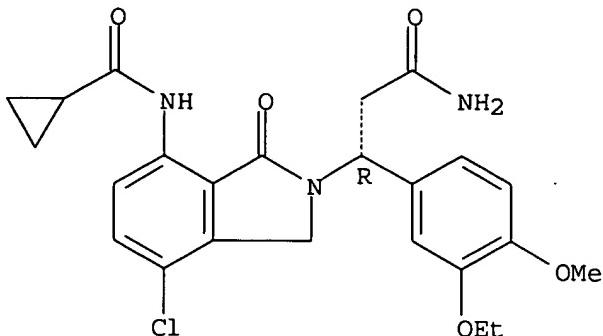


RN 760958-96-1 HCPLUS

CN 2H-Isoindole-2-propanamide, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -

(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

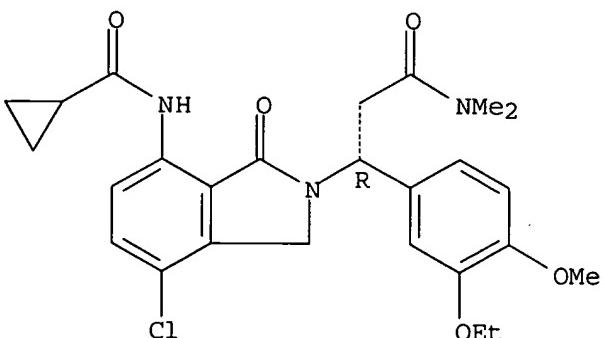
Absolute stereochemistry.



RN 760958-97-2 HCPLUS

CN 2H-Isoindole-2-propanamide, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N,N-dimethyl-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

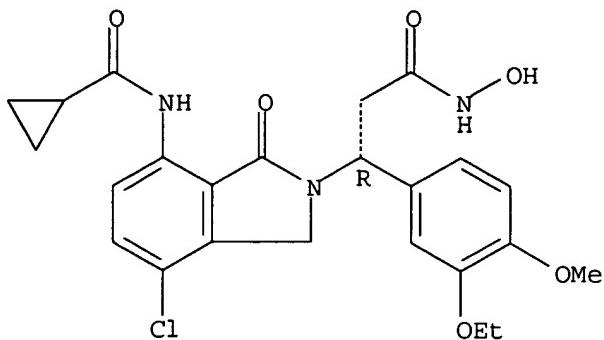
Absolute stereochemistry.



RN 760958-98-3 HCPLUS

CN 2H-Isoindole-2-propanamide, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-hydroxy-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

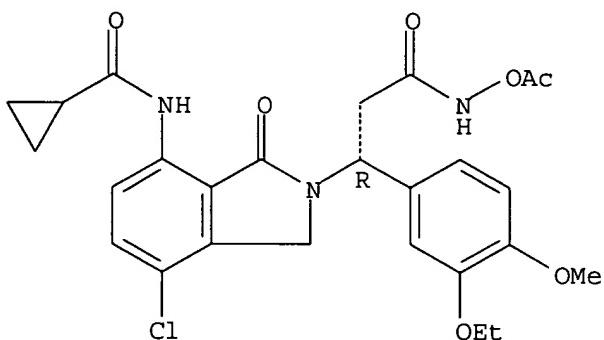
Absolute stereochemistry.



RN 760958-99-4 HCPLUS

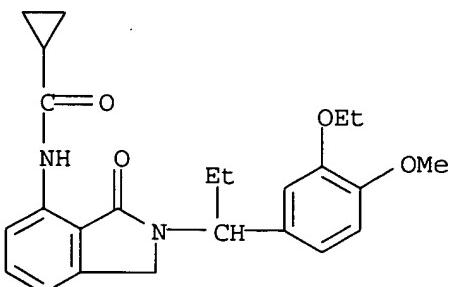
CN 2H-Isoindole-2-propanamide, N-(acetyloxy)-4-chloro-7-[cyclopropylcarbonyl]amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



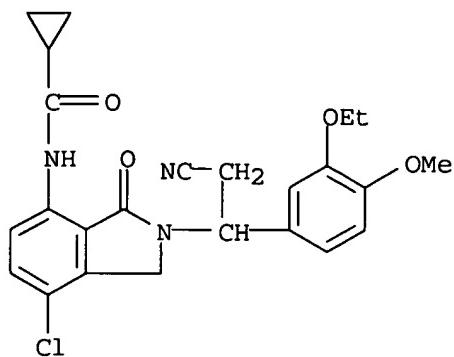
RN 760959-04-4 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)



RN 760959-06-6 HCPLUS

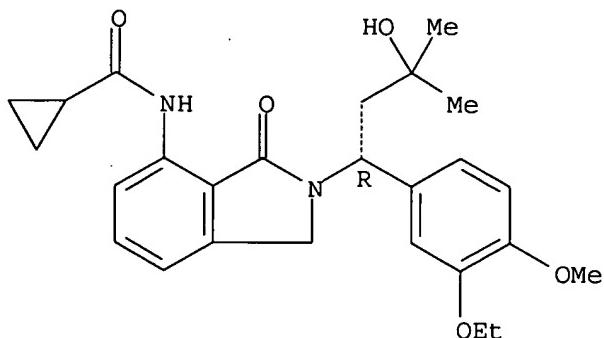
CN Cyclopropanecarboxamide, N-[7-chloro-2-[2-cyano-1-(3-ethoxy-4-methoxyphenyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)



RN 760959-09-9 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-hydroxy-3-methylbutyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

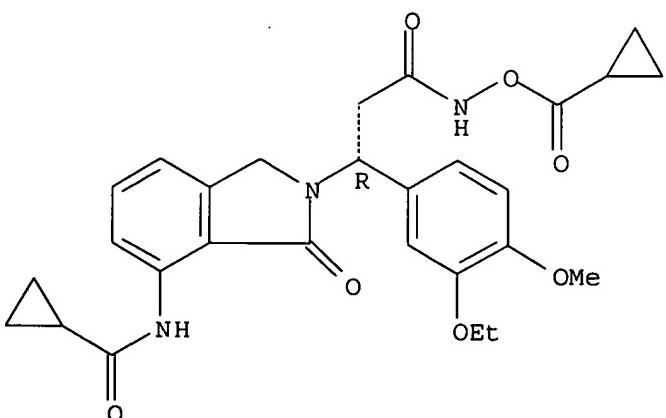
Absolute stereochemistry.



RN 760959-12-4 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]-N-[(cyclopropylcarbonyl)oxy]-β-(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (βR) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

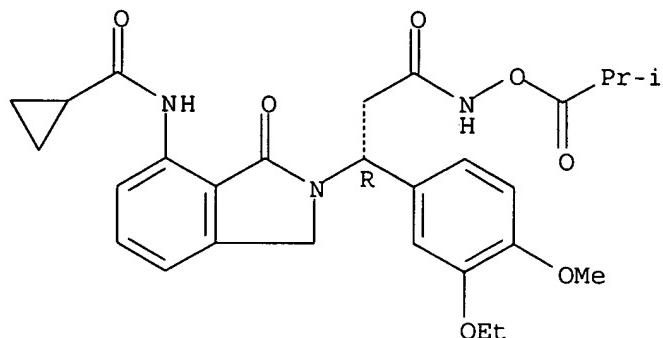


RN 760959-13-5 HCPLUS

03/07/2006 10748085.trn

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-(2-methyl-1-oxopropoxy)-1-oxo-, (R)- (9CI) (CA INDEX NAME)

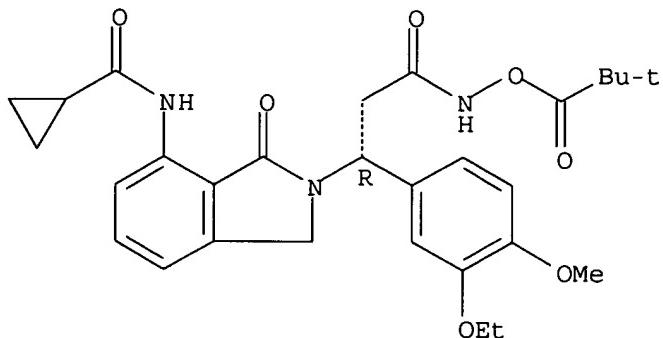
Absolute stereochemistry.



RN 760959-14-6 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]-N-(2,2-dimethyl-1-oxopropoxy)- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (R)- (9CI) (CA INDEX NAME)

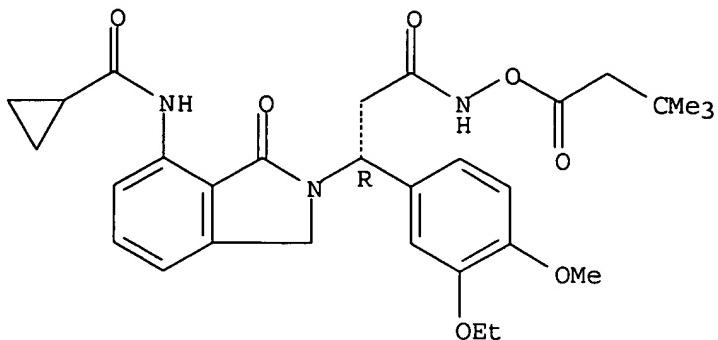
Absolute stereochemistry.



RN 760959-15-7 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]-N-(3,3-dimethyl-1-oxobutoxy)- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 760958-81-4 760958-84-7 760958-89-2

760958-94-9 760959-05-5

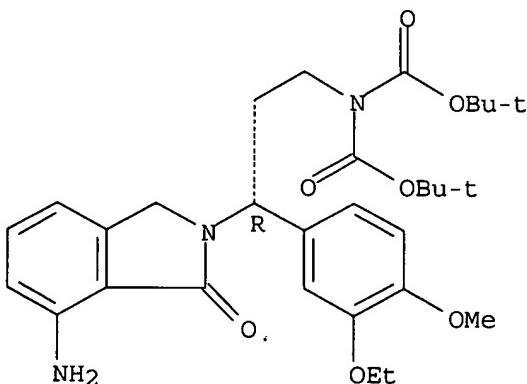
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of aminoisoindolone derivs. via heterocyclization of
aminopropanol derivs. and benzoic acid derivs.)

RN 760958-81-4 HCPLUS

CN Imidodicarbonic acid, [(3R)-3-(7-amino-1,3-dihydro-1-oxo-2H-isoindol-2-yl)-
3-(3-ethoxy-4-methoxyphenyl)propyl]-, bis(1,1-dimethylethyl) ester (9CI)
(CA INDEX NAME)

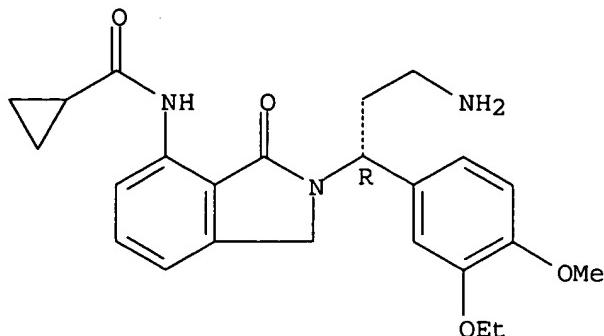
Absolute stereochemistry.



RN 760958-84-7 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-3-amino-1-(3-ethoxy-4-
methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA
INDEX NAME)

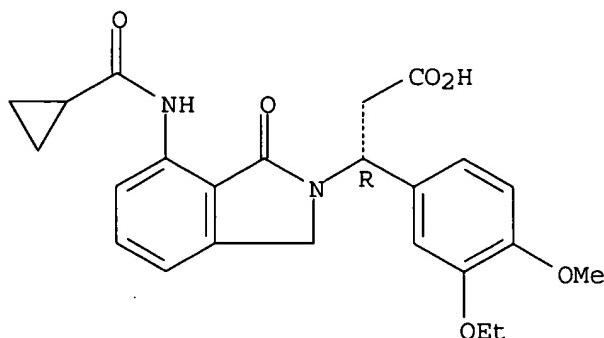
Absolute stereochemistry.



RN 760958-89-2 HCAPLUS

CN 2H-Isoindole-2-propanoic acid, 7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

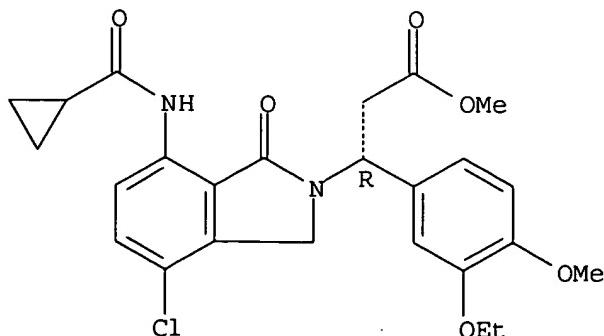
Absolute stereochemistry.



RN 760958-94-9 HCAPLUS

CN 2H-Isoindole-2-propanoic acid, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, methyl ester, (β R)- (9CI) (CA INDEX NAME)

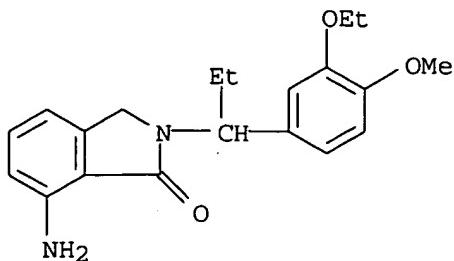
Absolute stereochemistry.



RN 760959-05-5 HCAPLUS

CN 1H-Isoindol-1-one, 7-amino-2-[1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-

dihydro- (9CI) (CA INDEX NAME)



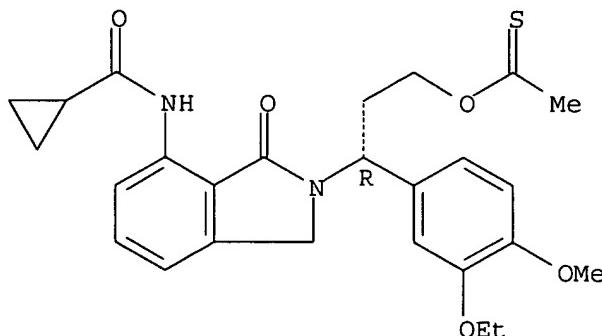
IT 760958-92-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of aminoisoindolone derivs. via heterocyclization of aminopropanol derivs. and benzoic acid derivs.)

RN 760958-92-7 HCPLUS

CN Ethanethioic acid, O-[(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)propyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 9 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:780509 HCPLUS

DOCUMENT NUMBER: 141:295861

TITLE: A preparation of novel isoindolone derivatives, useful as PDE4 inhibitors

INVENTOR(S): Man, Hon-Wah; Muller, George W.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2004080422 | A2 | 20040923 | WO 2004-US7742 | 20040312 |
| WO 2004080422 | A3 | 20041028 | | |

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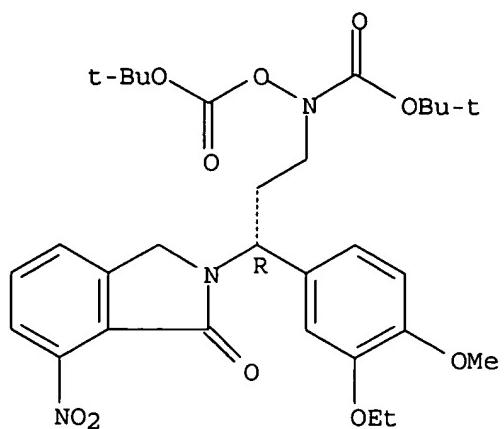
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| US 2004-798372 A3 20040312 | | | | |
| WO 2004-US7742 W 20040312 | | | | |

OTHER SOURCE(S) : MARPAT 141:295861
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

- AB The invention relates to a preparation of novel isoindolone derivs. of formula I [wherein: Y is C(O), CH₂, CH₂C(O), or SO₂; R₁ and R₂ are independently selected from (cyclo)alkyl, CF₂H, CF₃, or CH₂CHF₂, etc.; Z₁ is H, alkyl, NH₂, or NH₂, etc.; Z₂ is H or CHO, -C(O)-alkyl, or -C(O)Ph, etc.; X₁, X₂, X₃, and X₄ are independently selected from H, halogen, NO₂, CF₃, alkyl, or alkylimidazolyl, etc.; R₃ and R₄ are independently H or alkyl], useful for treatment or prevention of various diseases and disorders, for example, diseases associated with PDE4 (no biol. data). For instance, isoindolone derivative II was prepared via amination of N-(hydroxypropyl)isoindolone derivative III by N,O-(tert-butoxycarbonyl)hydroxylamine with a yield of 78%.
- IT 761434-15-5P 761434-16-6P 761434-20-2P
761434-23-5P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of novel isoindolone derivs. useful as PDE4 inhibitors)
- RN 761434-15-5 HCPLUS
 CN Carbamic acid, [(3R)-3-(1,3-dihydro-7-nitro-1-oxo-2H-isoindol-2-yl)-3-(3-ethoxy-4-methoxyphenyl)propyl] [(1,1-dimethylethoxy)carbonyl]oxy] -, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

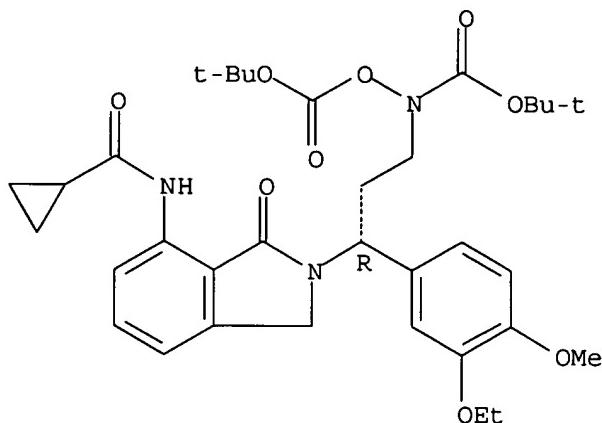
Absolute stereochemistry.



RN 761434-16-6 HCAPLUS

CN Carbamic acid, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)propyl][(1,1-dimethylethoxy)carbonyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

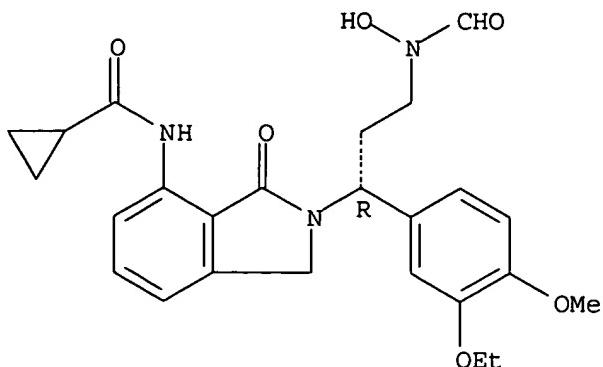
Absolute stereochemistry.



RN 761434-20-2 HCAPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(formylhydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

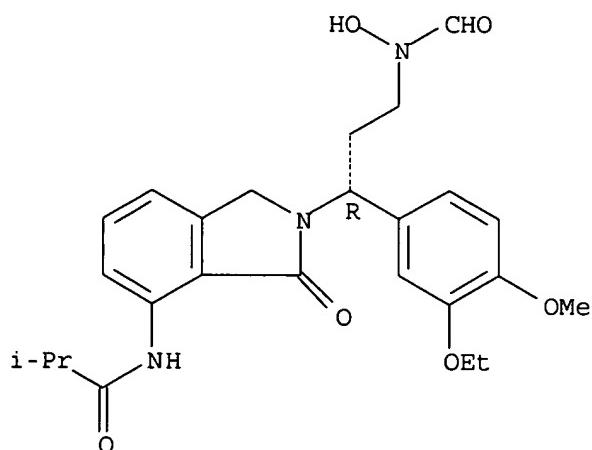
Absolute stereochemistry.



RN 761434-23-5 HCPLUS

CN Propanamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(formylhydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 761434-18-8P 761434-21-3P 761434-27-9P

761434-28-0P 761434-29-1P 761434-30-4P

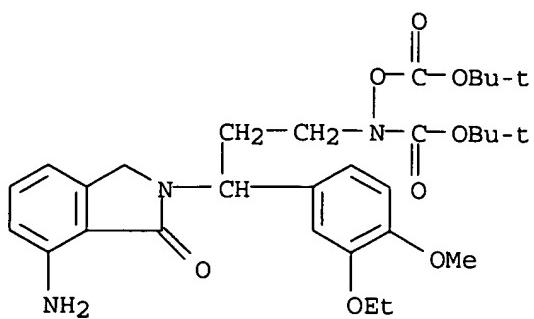
761434-32-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel isoindolone derivs. useful as PDE4 inhibitors)

RN 761434-18-8 HCPLUS

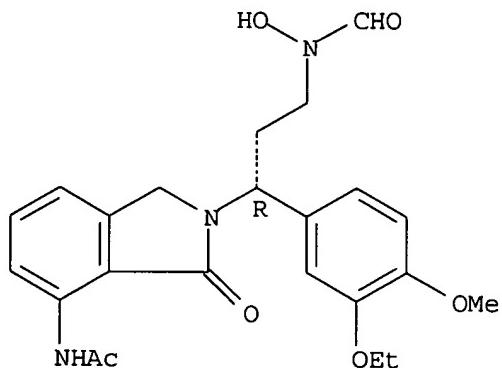
CN Carbamic acid, [3-(7-amino-1,3-dihydro-1-oxo-2H-isoindol-2-yl)-3-(3-ethoxy-4-methoxyphenyl)propyl]([(1,1-dimethylethoxy)carbonyl]oxy)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 761434-21-3 HCPLUS

CN Acetamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(formylhydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI)
(CA INDEX NAME)

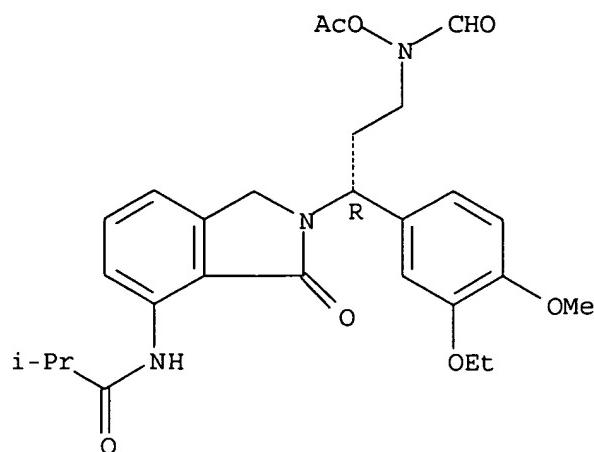
Absolute stereochemistry.



RN 761434-27-9 HCPLUS

CN Propanamide, N-[2-[(1R)-3-[(acetyloxy)formylamino]-1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-2-methyl- (9CI)
(CA INDEX NAME)

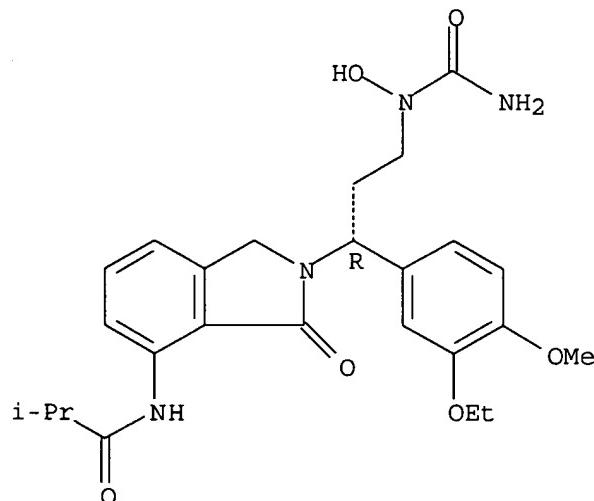
Absolute stereochemistry.



RN 761434-28-0 HCAPLUS

CN Propanamide, N-[2-[(1R)-3-[(aminocarbonyl)hydroxyamino]-1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-2-methyl- (9CI)
(CA INDEX NAME)

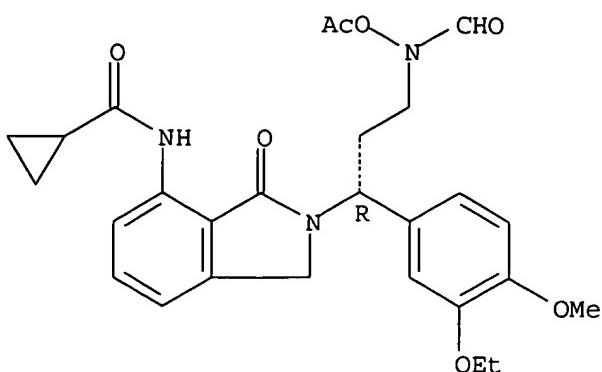
Absolute stereochemistry.



RN 761434-29-1 HCAPLUS

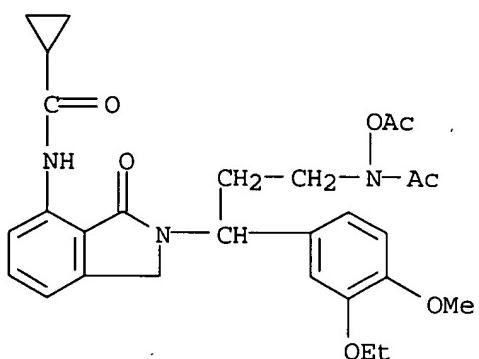
CN Cyclopropanecarboxamide, N-[2-[(1R)-3-[(acetyloxy)formylamino]-1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 761434-30-4 HCPLUS

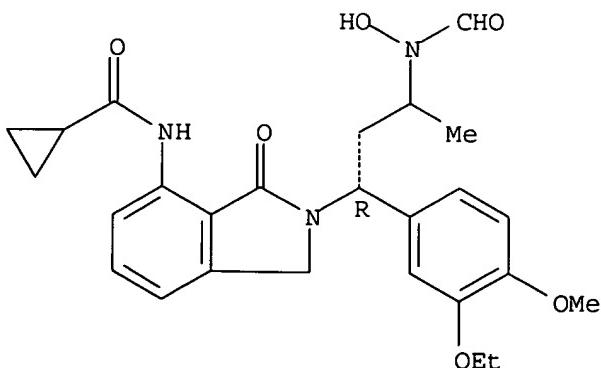
CN Cyclopropanecarboxamide, N-[2-[3-[acetyl(acetyloxy)amino]-1-(3-ethoxy-4-methoxyphenyl)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)



RN 761434-32-6 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(formylhydroxyamino)butyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 761434-17-7 761434-19-9 761434-22-4

761434-24-6 761434-31-5

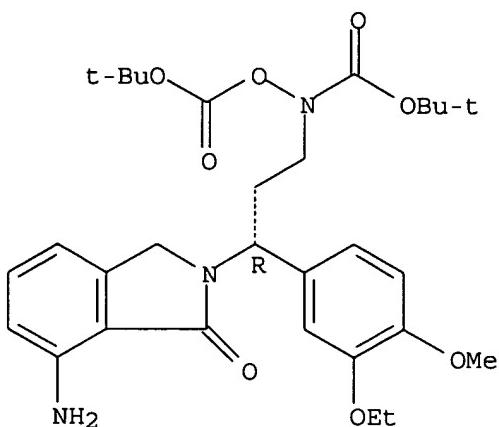
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of novel isoindolone derivs. useful as PDE4 inhibitors)

RN 761434-17-7 HCAPLUS

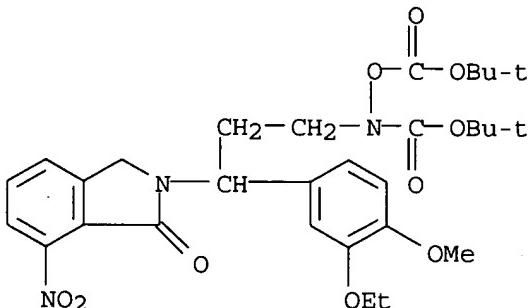
CN Carbamic acid, [(3R)-3-(7-amino-1,3-dihydro-1-oxo-2H-isoindol-2-yl)-3-(3-ethoxy-4-methoxyphenyl)propyl]([(1,1-dimethylethoxy)carbonyl]oxy)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 761434-19-9 HCAPLUS

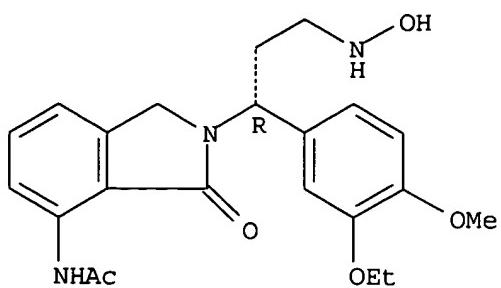
CN Carbamic acid, [3-(1,3-dihydro-7-nitro-1-oxo-2H-isoindol-2-yl)-3-(3-ethoxy-4-methoxyphenyl)propyl]([(1,1-dimethylethoxy)carbonyl]oxy)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 761434-22-4 HCAPLUS

CN Acetamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(hydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

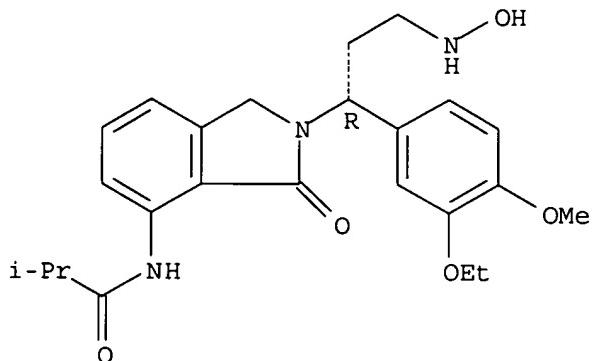
Absolute stereochemistry.



RN 761434-24-6 HCPLUS

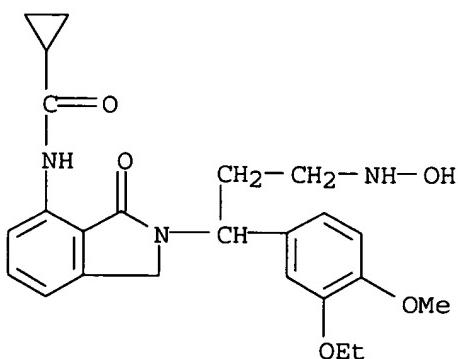
CN Propanamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(hydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]-2-methyl- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



RN 761434-31-5 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1-(3-ethoxy-4-methoxyphenyl)-3-(hydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)



IT 760958-78-9P 760958-82-5P 761434-14-4P

761434-34-8P

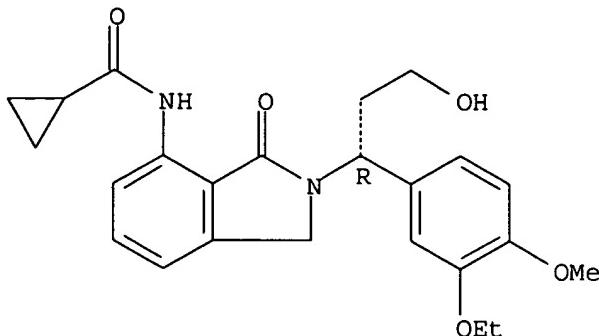
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of novel isoindolone derivs. useful as PDE4 inhibitors)

RN 760958-78-9 HCAPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-hydroxypropyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

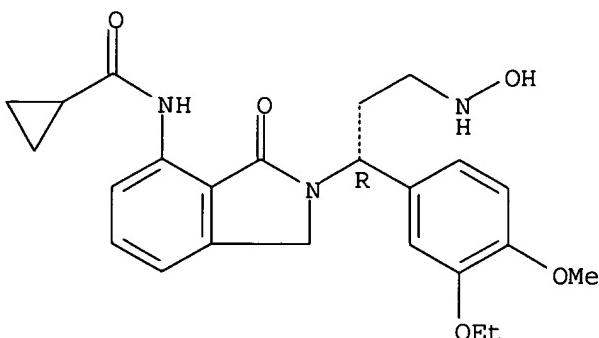
Absolute stereochemistry.



RN 760958-82-5 HCAPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(hydroxyamino)propyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

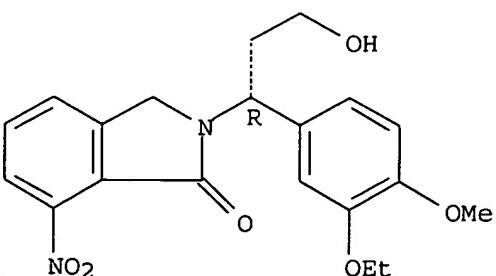
Absolute stereochemistry.



RN 761434-14-4 HCAPLUS

CN 1H-Isoindol-1-one, 2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-hydroxypropyl]-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)

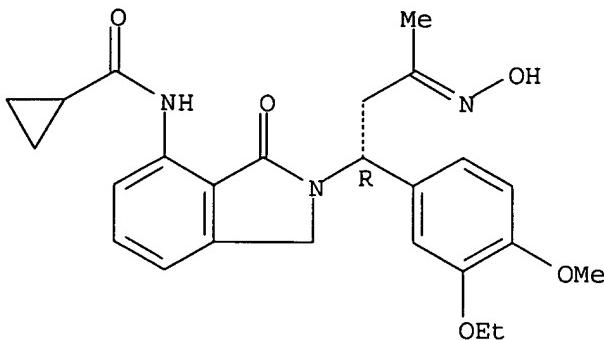
Absolute stereochemistry.



RN 761434-34-8 HCPLUS

CN Cyclopropanecarboxamide, N-[2-[(1R)-1-(3-ethoxy-4-methoxyphenyl)-3-(hydroxyimino)butyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



L10 ANSWER 10 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:739745 HCPLUS

DOCUMENT NUMBER: 141:248733

TITLE: Methods of using and compositions comprising selective cytokine inhibitory drugs for the treatment and management of disorders of the central nervous system

INVENTOR(S): Schafer, Peter H.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 28 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| US 2004175382 | A1 | 20040909 | US 2004-794877 | 20040305 |
| CA 2517845 | AA | 20040923 | CA 2004-2517845 | 20040305 |
| WO 2004080393 | A2 | 20040923 | WO 2004-US6782 | 20040305 |
| WO 2004080393 | A3 | 20041202 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG | | | | |
| EP 1605935 | A2 | 20051221 | EP 2004-717992 | 20040305 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK | | | | |

PRIORITY APPLN. INFO.: US 2003-452374P P 20030306
 WO 2004-US6782 W 20040305

OTHER SOURCE(S): MARPAT 141:248733

AB Methods of treating, preventing and/or managing central nervous system disorders, such as Parkinson disease, Alzheimer disease, mild cognitive impairment, Huntington disease, Amyotrophic Lateral Sclerosis, depression and defective long-term memory, and related syndromes are disclosed. Specific methods encompass the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active ingredient. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed. The effect of 3-(3,4-dimethoxy-phenyl)-3-(1-oxo-1,3-dihydro-isoindol-2-yl)-propionamide on TNF- α production in LPS-induced human peripheral blood mononuclear cells (PBMC) was examined

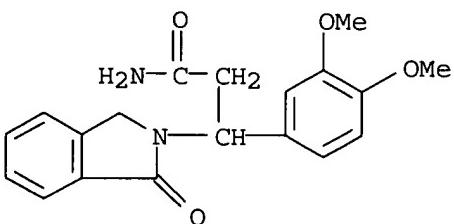
IT 167886-76-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(methods of using and compns. comprising selective cytokine inhibitory drugs for treatment and management of disorders of central nervous system)

RN 167886-76-2 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



L10 ANSWER 11 OF 39 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:589381 HCAPLUS

DOCUMENT NUMBER: 141:140314

TITLE: Preparation of 2-(fluoroalkoxyphenylalkyl)-1,3-dihydroisoindolones as PDE4, TNF- α , and/or MMP inhibitors

INVENTOR(S): Muller, George W.; Man, Hon-Wah; Zhang, Weihong

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|-----------------|----------|
| WO 2004060313 | A2 | 20040722 | WO 2003-US41568 | 20031229 |
| WO 2004060313 | A3 | 20050915 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, | | | |

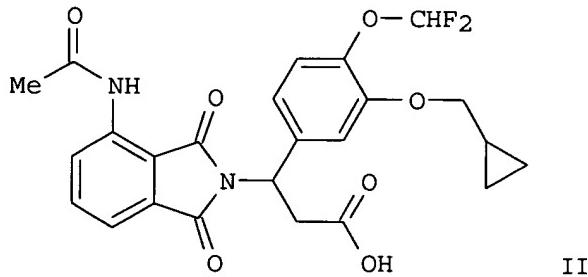
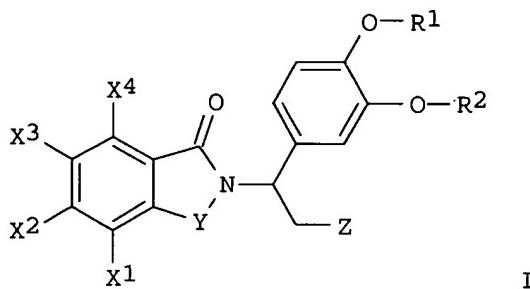
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 TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
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 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 CA 2511843 AA 20040722 CA 2003-2511843 20031229
 US 2004204448 A1 20041014 US 2003-748085 20031229
 EP 1587474 A2 20051026 EP 2003-808605 20031229
 EP 1587474 A3 20051102

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.: US 2002-436975P P 20021230
 WO 2003-US41568 W 20031229

OTHER SOURCE(S): MARPAT 141:140314

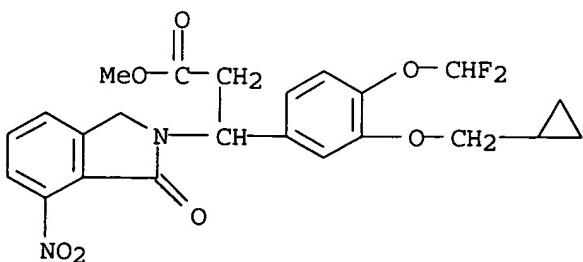
GI



AB Title compds. I [wherein X1-X4 = independently H, halo, NO₂, NH₂, CF₃, alkyl, cycloalkyl(alkyl), NR₇R₈-(alkyl), R₈CONH-(alkyl), NR₇R₈CONH-(alkyl), R₈OCONH-(alkyl), R₈O-(alkyl), imidazolyl(alkyl), pyrrolyl(alkyl), oxadiazolyl(alkyl), triazolyl(alkyl); or X1 and X2 or X2 and X3 or X3 and X4 may be taken together to form a (hetero)cycloalkyl ring; Y = CO, CH₂, CH₂CO, COCH₂, SO₂; Z = H, COR₃, alkylsulfonyl(alkyl), alkyl, CH₂OH, alkoxyethyl, CN; R₁ and R₂ = independently CHF₂, alkyl, cycloalkyl(alkyl); at least one of R₁ and R₂ = CHF₂; R₃ = NR₄R₅, alkyl, OH, alkoxy, (un)substituted Ph, PhCH₂; R₄ and R₅ = independently H, alkyl, OH, OCOR₆; R₆ = alkyl(amino), Ph, PhCH₂, aryl; R₇ and R₈ = independently H, alkyl, cycloalkyl(alkyl), NR₇R₈-alkyl, R₈O-alkyl, Ph, PhCH₂, aryl; or pharmaceutically acceptable salts, hydrates, solvates, clathrates, stereoisomers, and prodrugs thereof] were prepared For example, alkylation of 3,4-dihydroxybenzaldehyde with chlorodifluoromethane in the presence of

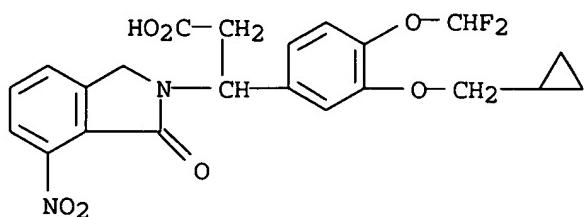
K₂CO₃ in DMF gave 4-difluoromethoxy-3-hydroxybenzaldehyde (15%), which was further alkylated with bromomethylcyclopropane under the same conditions to afford 3-cyclopropylmethoxy-4-difluoromethoxybenzaldehyde (100%). Reaction of the benzaldehyde with ammonium acetate in 95% EtOH, followed by addition of malonic acid provided 3-amino-3-(3-cyclopropylmethoxy-4-difluoromethoxyphenyl)propionic acid (52%). Condensation of the amine with 3-acetamidophthalic anhydride using sodium acetate in AcOH yielded the isoindoledione II (85%). I and their pharmaceutical compns., optionally in combination with another therapeutic agent, are useful for the treatment or prevention of diseases associated with phosphodiesterase 4 (PDE4) inhibition, abnormal tumor necrosis factor α (TNF- α) levels, and/or matrix metalloproteinase (MMP) inhibition, such as myelodysplastic syndrome, myeloproliferative disease, complex regional pain syndrome, cancer, inflammatory diseases, and autoimmune diseases (no data).

- IT 725256-76-8P, 3-[3-(Cyclopropylmethoxy)-4-difluoromethoxyphenyl]-3-(7-nitro-1-oxo-1,3-dihydroisoindol-2-yl)propionic acid methyl ester
 725256-77-9P, 3-[3-(Cyclopropylmethoxy)-4-difluoromethoxyphenyl]-3-(7-nitro-1-oxo-1,3-dihydroisoindol-2-yl)propionic acid
 725256-78-0P, 3-[3-(Cyclopropylmethoxy)-4-difluoromethoxyphenyl]-3-(7-nitro-1-oxo-1,3-dihydroisoindol-2-yl)-N,N-dimethylpropionamide
 725256-83-7P, 3-[7-(Cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid methyl ester 725256-84-8P, 3-(7-Amino-1-oxo-1,3-dihydroisoindol-2-yl)-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid methyl ester
 725256-85-9P, 3-(7-Acetylamino-1-oxo-1,3-dihydroisoindol-2-yl)-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid methyl ester
 725256-86-0P, 3-[7-(Acetylamino)-1-oxo-1,3-dihydroisoindol-2-yl]-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid 725256-87-1P,
 3-[7-(Cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid 725257-12-5P,
 3-[3,4-Bis(difluoromethoxy)phenyl]-3-[7-(cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]propionic acid
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (PDE4, TNF- α , and/or MMP inhibitor; preparation of (fluoroalkoxyphenylalkyl)isoindolones as PDE4, TNF- α , and/or MMP inhibitors for treatment of inflammatory diseases, autoimmune diseases, cancer, and pain)
- RN 725256-76-8 HCPLUS
 CN 2H-Isoindole-2-propanoic acid, β -[3-(cyclopropylmethoxy)-4-(difluoromethoxy)phenyl]-1,3-dihydro-7-nitro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

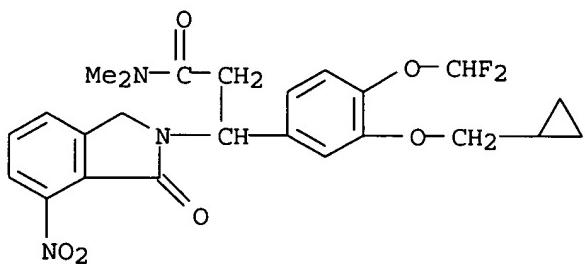


- RN 725256-77-9 HCPLUS
 CN 2H-Isoindole-2-propanoic acid, β -[3-(cyclopropylmethoxy)-4-

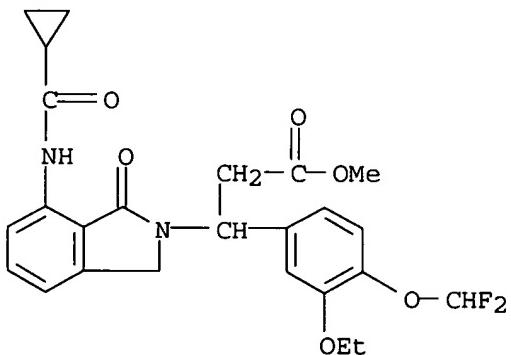
(difluoromethoxy)phenyl]-1,3-dihydro-7-nitro-1-oxo- (9CI) (CA INDEX NAME)



RN 725256-78-0 HCPLUS

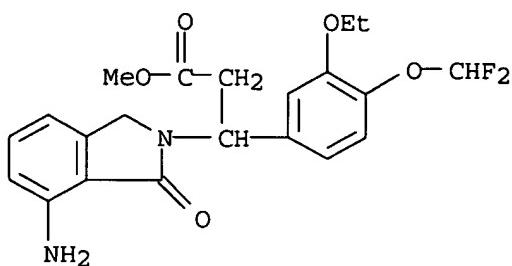
CN 2H-Isoindole-2-propanamide, β -[3-(cyclopropylmethoxy)-4-(difluoromethoxy)phenyl]-1,3-dihydro-N,N-dimethyl-7-nitro-1-oxo- (9CI)
(CA INDEX NAME)

RN 725256-83-7 HCPLUS

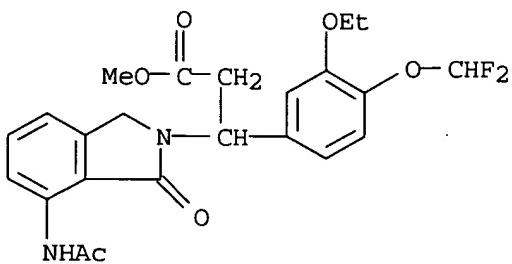
CN 2H-Isoindole-2-propanoic acid, 7-[(cyclopropylcarbonyl)amino]- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo-, methyl ester (9CI)
(CA INDEX NAME)

RN 725256-84-8 HCPLUS

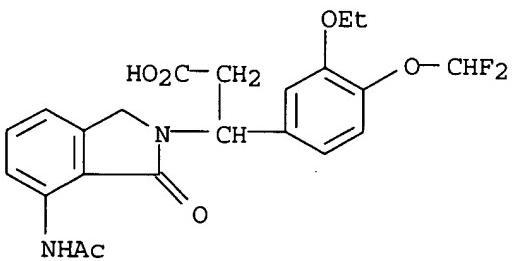
CN 2H-Isoindole-2-propanoic acid, 7-amino- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



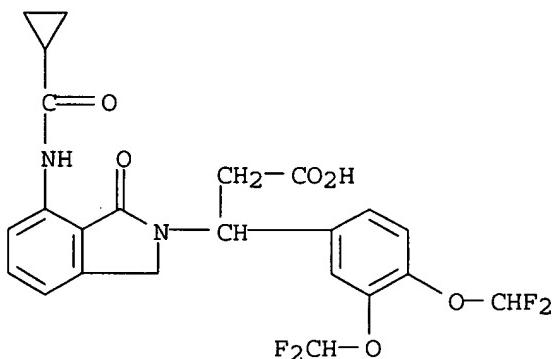
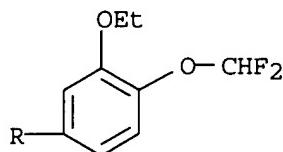
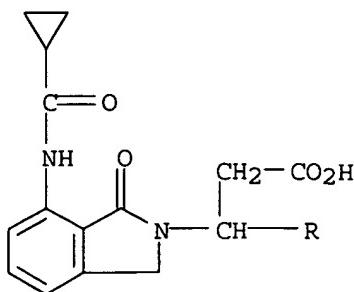
RN 725256-85-9 HCAPLUS
CN 2H-Isoindole-2-propanoic acid, 7-(acetylamino)-β-[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



RN 725256-86-0 HCAPLUS
CN 2H-Isoindole-2-propanoic acid, 7-(acetylamino)-β-[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



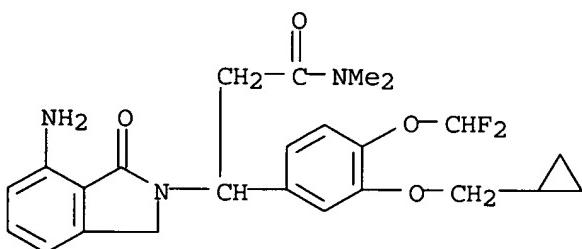
RN 725256-87-1 HCAPLUS
CN 2H-Isoindole-2-propanoic acid, 7-[(cyclopropylcarbonyl)amino]-β-[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



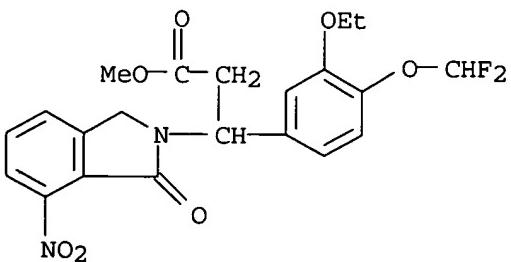
- IT 725256-79-1P, 3-(7-Amino-1-oxo-1,3-dihydroisoindol-2-yl)-3-[3-(cyclopropylmethoxy)-4-difluoromethoxyphenyl]-N,N-dimethylpropionamide
 725256-82-6P, 3-(4-Difluoromethoxy-3-ethoxyphenyl)-3-(7-nitro-1-oxo-1,3-dihydroisoindol-2-yl)propionic acid methyl ester
 725256-88-2P, Cyclopropanecarboxylic acid N-[2-[2-carbamoyl-1-(4-difluoromethoxy-3-ethoxyphenyl)ethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide 725256-89-3P, Cyclopropanecarboxylic acid N-[2-[1-(4-difluoromethoxy-3-ethoxyphenyl)-2-(dimethylcarbamoyl)ethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide 725256-90-6P,
 Cyclopropanecarboxylic acid N-[2-[1-(4-difluoromethoxy-3-ethoxyphenyl)-2-hydroxycarbamoyl]ethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide
 725256-91-7P, 3-(7-Acetylamino-1-oxo-1,3-dihydroisoindol-2-yl)-3-(4-difluoromethoxy-3-ethoxyphenyl)propionamide 725256-92-8P,
 3-(7-Acetylamino-1-oxo-1,3-dihydroisoindol-2-yl)-3-(4-difluoromethoxy-3-ethoxyphenyl)-N,N-dimethylpropionamide 725256-93-9P,
 3-(7-Acetylamino-1-oxo-1,3-dihydroisoindol-2-yl)-3-(4-difluoromethoxy-3-ethoxyphenyl)-N-hydroxypropionamide 725257-02-3P,
 Cyclopropanecarboxylic acid N-[2-[2-carbamoyl-1-(4-difluoromethoxy-3-

ethoxyphenyl)ethyl]-7-chloro-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide
725257-05-6P, N-[2-[1-(4-Difluoromethoxy-3-ethoxyphenyl)-3-(morpholin-4-yl)-3-oxopropyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]acetamide
725257-08-9P, 3-[3,4-Bis(difluoromethoxy)phenyl]-3-[4-chloro-7-(cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]propionic acid methyl ester **725257-11-4P**, Cyclopropanecarboxylic acid N-[2-[1-[3,4-bis(difluoromethoxy)phenyl]-2-(dimethylcarbamoyl)ethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide **725257-13-6P**, Cyclopropanecarboxylic acid N-[2-[1-[3,4-bis(difluoromethoxy)phenyl]-2-carbamoylethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide **725257-14-7P**, Cyclopropanecarboxylic acid N-[2-[1-[3,4-bis(difluoromethoxy)phenyl]-2-hydroxycarbamoylethyl]-3-oxo-2,3-dihydro-1H-isoindol-4-yl]amide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(PDE4, TNF- α , and/or MMP inhibitor; preparation of (fluoroalkoxyphenylalkyl)isoindolones as PDE4, TNF- α , and/or MMP inhibitors for treatment of inflammatory diseases, autoimmune diseases, cancer, and pain)

RN 725256-79-1 HCPLUS

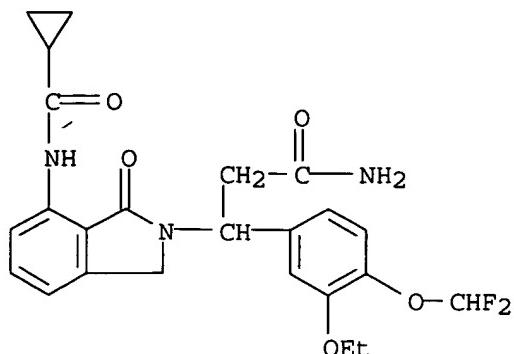
CN 2H-Isoindole-2-propanamide, 7-amino- β -[3-(cyclopropylmethoxy)-4-(difluoromethoxy)phenyl]-1,3-dihydro-N,N-dimethyl-1-oxo- (9CI) (CA INDEX NAME)

RN 725256-82-6 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-7-nitro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

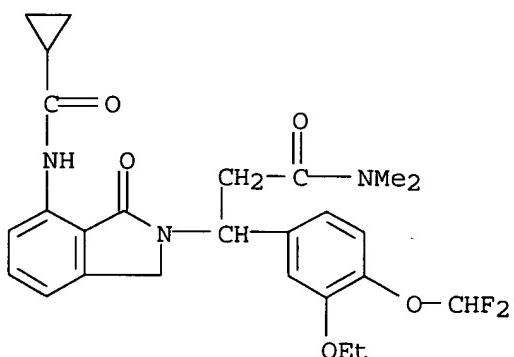
RN 725256-88-2 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



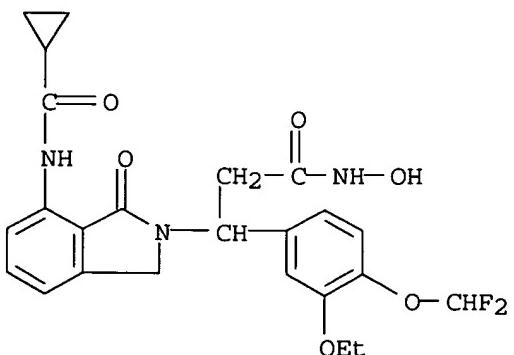
RN 725256-89-3 HCAPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]-β-[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-N,N-dimethyl-1-oxo- (9CI) (CA INDEX NAME)



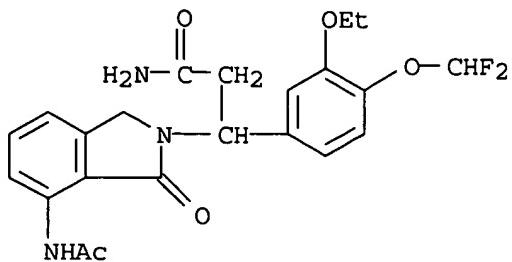
RN 725256-90-6 HCAPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]-β-[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)

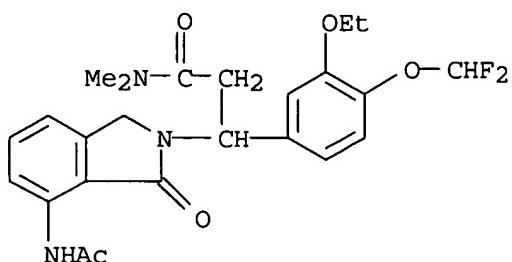


RN 725256-91-7 HCAPLUS

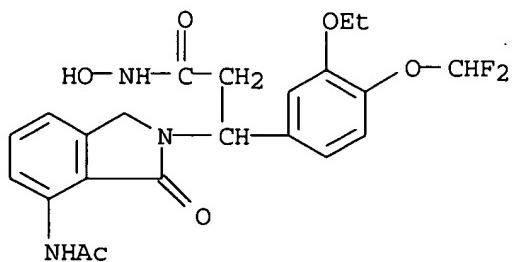
CN 2H-Isoindole-2-propanamide, 7-(acetylamino)-β-[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 725256-92-8 HCAPLUS

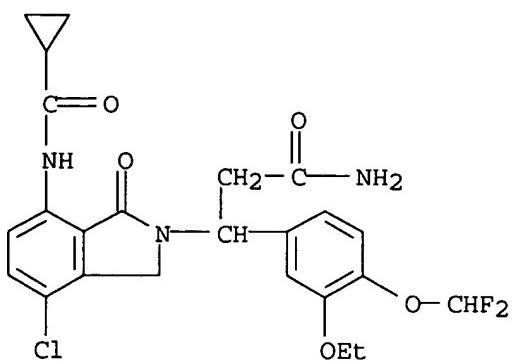
CN 2H-Isoindole-2-propanamide, 7-(acetylamino)- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-N,N-dimethyl-1-oxo- (9CI) (CA INDEX NAME)

RN 725256-93-9 HCAPLUS

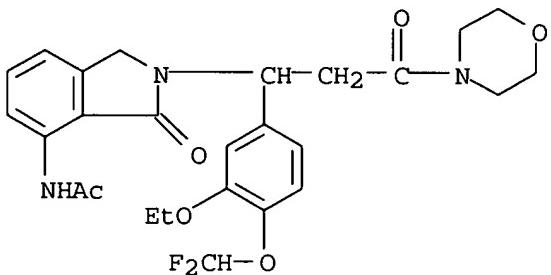
CN 2H-Isoindole-2-propanamide, 7-(acetylamino)- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)

RN 725257-02-3 HCAPLUS

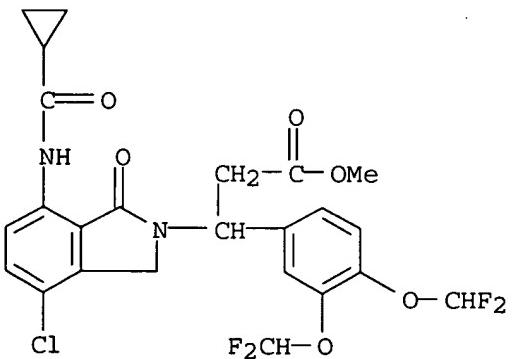
CN 2H-Isoindole-2-propanamide, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 725257-05-6 HCAPLUS

CN Acetamide, N-[2-[1-[4-(difluoromethoxy)-3-ethoxyphenyl]-3-(4-morpholinyl)-3-oxopropyl]-2,3-dihydro-3-oxo-1*H*-isoindol-4-yl]- (9CI) (CA INDEX NAME)

RN 725257-08-9 HCAPLUS

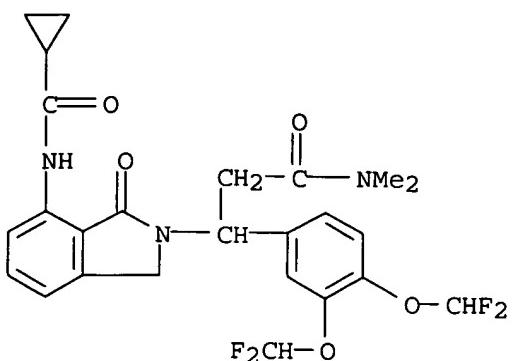
CN 2*H*-Isoindole-2-propanoic acid, β -[3,4-bis(difluoromethoxy)phenyl]-4-chloro-7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 725257-11-4 HCAPLUS

CN 2*H*-Isoindole-2-propanamide, β -[3,4-bis(difluoromethoxy)phenyl]-7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-N,N-dimethyl-1-oxo- (9CI) (CA INDEX NAME)

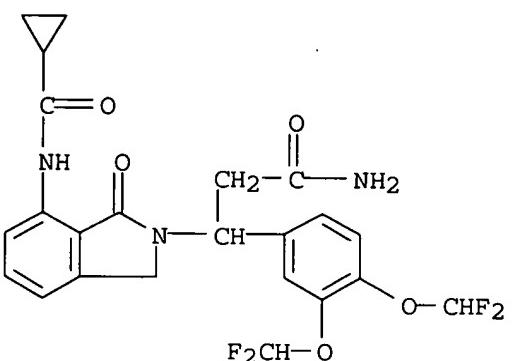
03/07/2006

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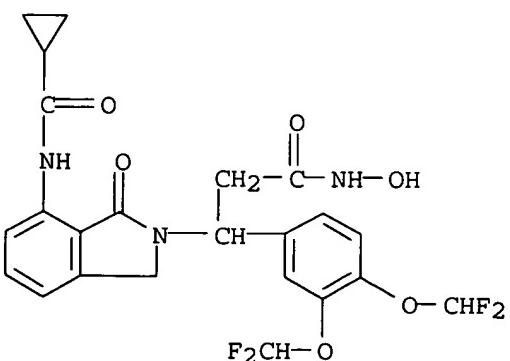
RN 725257-13-6 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -[3,4-bis(difluoromethoxy)phenyl]-7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 725257-14-7 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -[3,4-bis(difluoromethoxy)phenyl]-7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)



IT 725257-03-4, 3-[4-Chloro-7-(cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]-3-(4-difluoromethoxy-3-ethoxyphenyl)propionic acid
725257-15-8, 3-[3,4-Bis(difluoromethoxy)phenyl]-3-[7-

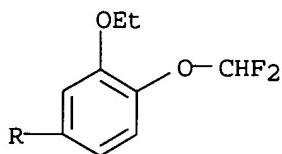
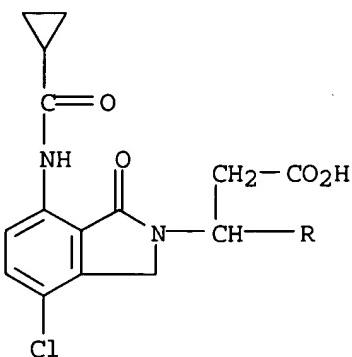
(cyclopropylcarbonylamino)-1-oxo-1,3-dihydroisoindol-2-yl]propionic acid methyl ester

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of (fluoroalkoxyphenylalkyl)isoindolones as PDE4, TNF- α , and/or MMP inhibitors for treatment of inflammatory diseases, autoimmune diseases, cancer, and pain)

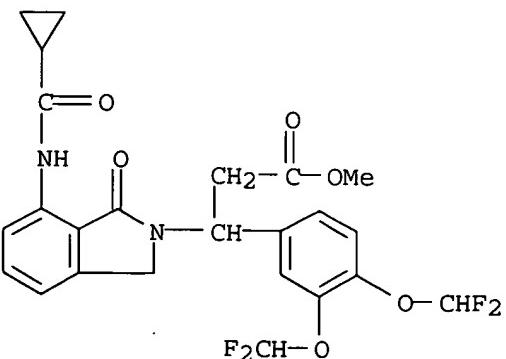
RN 725257-03-4 HCPLUS

CN 2H-Isoindole-2-propanoic acid, 4-chloro-7-[(cyclopropylcarbonyl)amino]- β -[4-(difluoromethoxy)-3-ethoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 725257-15-8 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -[3,4-bis(difluoromethoxy)phenyl]-7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



TITLE: Methods of using and compositions comprising
 (-)-3-(3,4-dimethoxy-phenyl)-3-(1-oxo-1,3-dihydro-
 isoindol-2-yl)-propionamide
 INVENTOR(S): Muller, George W.; Chen, Roger Shen-chu
 PATENT ASSIGNEE(S): Celgene Corporation, USA
 SOURCE: PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|------------|
| WO 2004054501 | A2 | 20040701 | WO 2003-US36741 | 20031117 |
| WO 2004054501 | A3 | 20040826 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2506442 | AA | 20040701 | CA 2003-2506442 | 20031117 |
| US 2004167199 | A1 | 20040826 | US 2003-715184 | 20031117 |
| EP 1569599 | A2 | 20050907 | EP 2003-789795 | 20031117 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003016256 | A | 20051004 | BR 2003-16256 | 20031117 |
| CN 1738614 | A | 20060222 | CN 2003-80108901 | 20031117 |
| PRIORITY APPLN. INFO.: | | | US 2002-427380P | P 20021118 |
| | | | WO 2003-US36741 | W 20031117 |

AB Enantiomerically pure (-)-3-(3,4-dimethoxy-phenyl)-3-(1-oxo-1,3-dihydro-
 isoindol-2-yl)-propionamide (I), prodrugs, metabolites, polymorphs, salts,
 solvates, and clathrates thereof are described. Methods of treating
 and/or preventing various diseases and disorders, such as those
 ameliorated by the reduction of levels of TNF- α or the inhibition of
 phosphodiesterase 4 (PDE4), are also disclosed. For example, I gave an
 TNF- α IC50 of 3 μ M and 16 μ M in LPS- and IL1 β -induced
 production of TNF- α , resp.. Also, I showed selectivity for human PDE4
 with IC50 of 4.4 μ M.

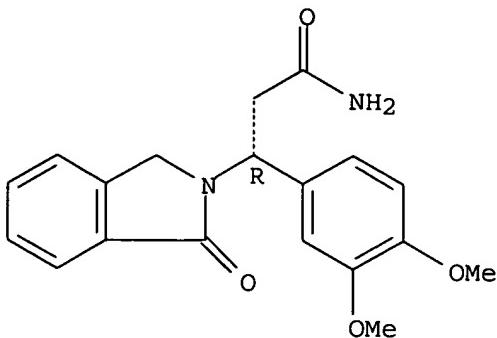
IT 682359-77-9P
 RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic
 preparation); THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); USES (Uses)

(preparation, compns. and therapeutic uses of (dimethoxyphenyl)-
 (oxodihydroisoindolyl)propionamide enantiomer as inhibitor of
 TNF α and PDE4)

RN 682359-77-9 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-
 , (β R)- (9CI) (CA INDEX NAME)

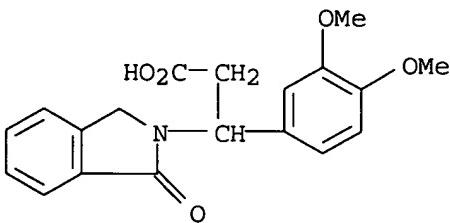
Absolute stereochemistry. Rotation (-).



IT 167886-75-1

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation, compns. and therapeutic uses of (dimethoxyphenyl)-
 (oxodihydroisoindolyl)propionamide enantiomer as inhibitor of
 TNF α and PDE4)

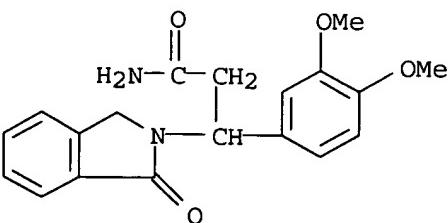
RN 167886-75-1 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

IT 167886-76-2P 713513-04-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation, compns. and therapeutic uses of (dimethoxyphenyl)-
 (oxodihydroisoindolyl)propionamide enantiomer as inhibitor of
 TNF α and PDE4)

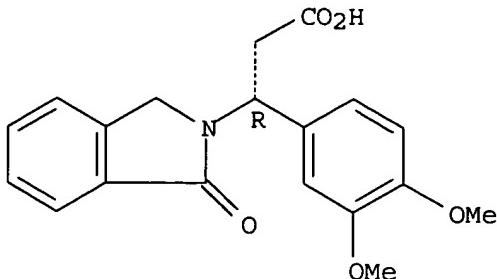
RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

RN 713513-04-3 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 13 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:453020 HCPLUS
 DOCUMENT NUMBER: 141:12309
 TITLE: Compositions comprising (+)-3-(3,4-dimethoxyphenyl)-3-(1-oxo-1,3-dihydroisoindol-2-yl)propionamide
 INVENTOR(S): Muller, George W.; Chen, Roger Shen-chu
 PATENT ASSIGNEE(S): Celgene Corporation, USA
 SOURCE: PCT Int. Appl., 54 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|----------|------------------|------------|
| WO 2004045597 | A1 | 20040603 | WO 2003-US36740 | 20031117 |
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| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2506232 | AA | 20040603 | CA 2003-2506232 | 20031117 |
| AU 2003294311 | A1 | 20040615 | AU 2003-294311 | 20031117 |
| BR 2003016259 | A | 20051004 | BR 2003-16259 | 20031117 |
| EP 1581205 | A1 | 20051005 | EP 2003-789794 | 20031117 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1738613 | A | 20060222 | CN 2003-80108923 | 20031117 |
| PRIORITY APPLN. INFO.: | | | US 2002-427379P | P 20021118 |
| | | | WO 2003-US36740 | W 20031117 |
| AB | Enantiomerically pure (+)-3-(3,4-dimethoxyphenyl)-3-(1-oxo-1,3-dihydroisoindol-2-yl)propionamide (I), and prodrugs, metabolites, polymorphs, salts, solvates (e.g., hydrates), and clathrates are discussed. Methods of treating and/or preventing various diseases and disorders, such as those ameliorated by the reduction of levels of TNF- α or the inhibition of PDE4, are also disclosed. Thus, I was prepared in a series of steps starting from 3,4-dimethoxybenzaldehyde and malonic acid. | | | |

Capsules contained 40.0% I.

IT **682359-78-0P**

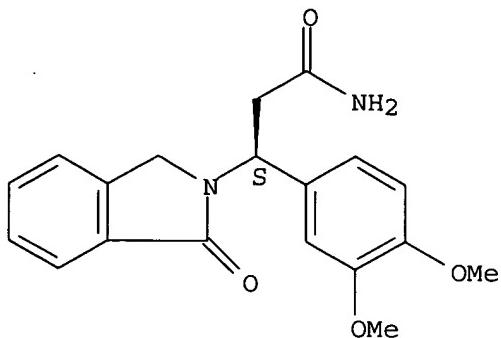
RL: PKT (Pharmacokinetics); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(compns. comprising (dimethoxyphenyl)oxodihydroisoindolylpropionamide)

RN 682359-78-0 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, (BS) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

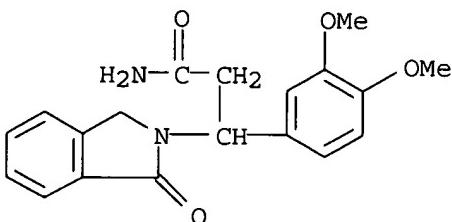


IT **167886-76-2P**

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(compns. comprising (dimethoxyphenyl)oxodihydroisoindolylpropionamide)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

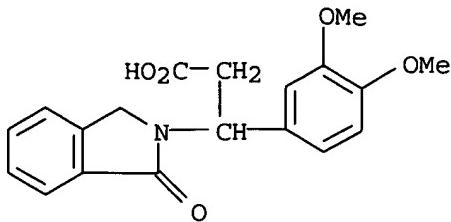


IT **167886-75-1**

RL: RCT (Reactant); RACT (Reactant or reagent)
(compns. comprising (dimethoxyphenyl)oxodihydroisoindolylpropionamide)

RN 167886-75-1 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



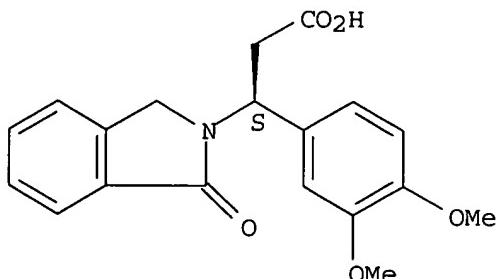
IT 696641-78-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (compns. comprising (dimethoxyphenyl)oxodihydroisoindolylpropionamide)

RN 696641-78-8 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, (β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 14 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:430683 HCPLUS

DOCUMENT NUMBER: 140:417943

TITLE: Methods of using and compositions comprising selective cytokine inhibitory drugs for the treatment and management of myeloproliferative diseases

INVENTOR(S): Zeldis, Jerome B.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

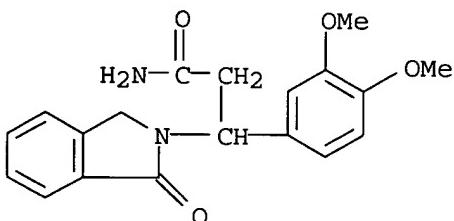
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2004043336 | A2 | 20040527 | WO 2003-US11325 | 20030413 |
| WO 2004043336 | A3 | 20040729 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |

OTHER SOURCE(S) : MARPAT 140:417943
AB Methods of treating, preventing and/or managing a myeloproliferative disease (MPD) are disclosed. Specific methods encompass the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent, and/or the transplantation of blood or cells. Particular second active agent is capable of suppressing the overprodn. of hematopoietic stem cells or ameliorating one or more of the symptoms of MPD. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed.
IT 167886-76-2
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as selective cytokine inhibitory drug; selective cytokine inhibitory drugs for treatment and management of myeloproliferative diseases)
RN 167886-76-2 HCAPLUS
CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-(9CI) (CA INDEX NAME)



L10 ANSWER 15 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:428800 HCPLUS
DOCUMENT NUMBER: 140:417925
TITLE: Methods and compositions using selective cytokine inhibitory drugs for treatment and management of cancers and other diseases
INVENTOR(S): Zeldis, Jerome B.
PATENT ASSIGNEE(S): Celgene Corporation, USA
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

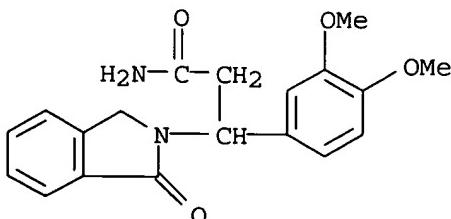
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|----------|
| WO 2004043378 | A2 | 20040527 | WO 2003-US35545 | 20031106 |
| WO 2004043378 | A3 | 20040902 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2505131 | AA | 20040527 | CA 2003-2505131 | 20031106 |
| EP 1567154 | A2 | 20050831 | EP 2003-783234 | 20031106 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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| BR 2003016057 | A | 20050920 | BR 2003-16057 | 20031106 |
| CN 1735412 | A | 20060215 | CN 2003-80108390 | 20031106 |
| US 2006035955 | A1 | 20060216 | US 2005-534325 | 20050912 |
| PRIORITY APPLN. INFO.: US 2002-424601P P 20021106
WO 2003-US35545 W 20031106 | | | | |

OTHER SOURCE(S) : MARPAT 140:417925

AB Methods for treating, preventing and/or managing cancer as well as and diseases and disorders associated with, or characterized by, undesired angiogenesis are disclosed. Specific methods encompass the administration of a selective cytokine inhibitory drug alone or in combination with a second active ingredient. The invention further discloses methods for reducing or avoiding adverse side effects associated with chemotherapy, radiation therapy, hormonal therapy, biol. therapy or immunotherapy which comprise the administration of a selective cytokine inhibitory drug. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed.

IT 167886-76-2
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cytokine inhibitors for treatment and management of cancers and other diseases, and use with other therapeutic means)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β - (3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

L10 ANSWER 16 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:392056 HCPLUS
 DOCUMENT NUMBER: 140:386062
 TITLE: Methods of using and compositions comprising selective

cytokine inhibitory drugs for treatment and management
of macular degeneration

INVENTOR(S) : Zeldis, Jerome B.

PATENT ASSIGNEE(S) : USA

SOURCE: U.S. Pat. Appl. Publ., 19 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| US 2004091454 | A1 | 20040513 | US 2003-699110 | 20031030 |
| CA 2504263 | AA | 20040521 | CA 2003-2504263 | 20031031 |
| WO 2004041181 | A2 | 20040521 | WO 2003-US34535 | 20031031 |
| WO 2004041181 | A3 | 20050217 | | |
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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
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| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
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ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
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| EP 1567148 | A2 | 20050831 | EP 2003-779423 | 20031031 |
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| BR 2003015889 | A | 20051004 | BR 2003-15889 | 20031031 |
| WO 2005044269 | A1 | 20050519 | WO 2004-US13253 | 20040428 |
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TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
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AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
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SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG | | | | |

| | | |
|------------------------|-----------------|------------|
| PRIORITY APPLN. INFO.: | US 2002-422900P | P 20021031 |
| | US 2003-699110 | A 20031030 |
| | WO 2003-US34535 | W 20031031 |

OTHER SOURCE(S) : MARPAT 140:386062

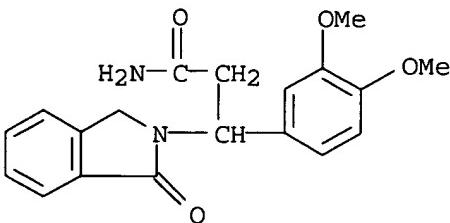
AB Methods of treating, preventing and/or managing macular degeneration are disclosed. Specific embodiments encompass the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent and/or surgery. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed. Patients with macular degeneration were treated by photodynamic therapy with verteporfin alone, or with the addition of 20 mg/day of selective cytokine inhibitory drug (+)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4 acetylaminooindoline 1,3-dione. The neovascular cascade is sufficiently hindered in the group receiving (+)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4

acetylaminooisoindoline 1,3-dione to indefinitely prolong the effects of the photodynamic therapy.

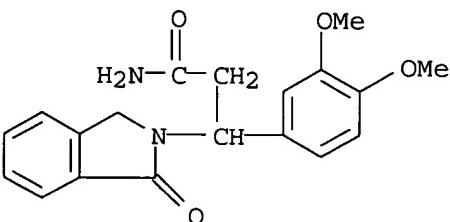
IT 167886-76-2 167886-76-2D, salts, solvates, stereoisomers
 RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (selective cytokine inhibitory drugs and compns. for treatment and management of macular degeneration)

RN 167886-76-2 HCAPLUS

CN 2H-Isoindole-2-propanamide, β - (3,4-dimethoxyphenyl) -1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 167886-76-2 HCAPLUS
 CN 2H-Isoindole-2-propanamide, β - (3,4-dimethoxyphenyl) -1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



L10 ANSWER 17 OF 39 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:372861 HCAPLUS
 DOCUMENT NUMBER: 140:368720
 TITLE: Compositions comprising selective cytokine inhibitory drugs for treatment, modification and management of pain
 INVENTOR(S): Zeldis, Jerome B.; Faleck, Herbert; Manning, Donald C.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 27 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| ----- | ----- | ----- | ----- | ----- |
| US 2004087558 | A1 | 20040506 | US 2003-693722 | 20031023 |
| PRIORITY APPLN. INFO.: | | | US 2002-421004P | P 20021024 |
| OTHER SOURCE(S): | MARPAT 140:368720 | | | |
| AB | Methods of treating, preventing, modifying and managing various types of | | | |

pain are disclosed. Specific methods comprise the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent and/or surgery, psychol. or phys. therapy. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed. For example, in vitro studies suggested a pharmacol. activity profile for a selective inhibitory drug 3-(3,4-dimethoxyphenyl)-3-(1-oxo-1,3-dihydroisoindol-2-yl)propionamide (I) was 5 to 50 times more potent than thalidomide. The pharmacol. effects of I may derive from its action as an inhibitor of the generation of inflammatory cytokines. The cardiovascular and respiratory changes induced by three ascending doses of I (400, 800, and 1200 mg/kg/day) in dogs were minimal when compared to the vehicle control group.

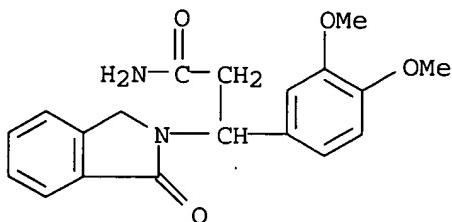
IT 167886-76-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(selective cytokine inhibitors for treatment, modification and management of pain)

RN 167886-76-2 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



L10 ANSWER 18 OF 39 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:368895 HCAPLUS

DOCUMENT NUMBER: 140:368714

TITLE: Methods and compositions using selective cytokine inhibitory drugs, alone or in combination with other therapeutic means, for treatment, modification and management of pain

INVENTOR(S): Zeldis, Jerome B.; Faleck, Herbert; Manning, Donald C.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|----------|
| WO 2004037207 | A2 | 20040506 | WO 2003-US334005 | 20031024 |
| WO 2004037207 | A3 | 20050210 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, | | | | |

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 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
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 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 CA 2503054 AA 20040506 CA 2003-2503054 20031024
 EP 1562586 A2 20050817 EP 2003-779299 20031024
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 BR 2003015593 A 20050906 BR 2003-15593 20031024
 JP 2006505591 T2 20060216 JP 2004-547196 20031024
 PRIORITY APPLN. INFO.: US 2002-421004P P 20021024
 WO 2003-US34005 W 20031024

OTHER SOURCE(S): MARPAT 140:368714

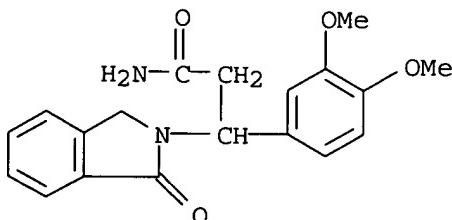
AB Methods of treating, preventing, modifying and managing various types of pain are disclosed. Specific methods comprise the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent and/or surgery, psychol. or phys. therapy. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed.

IT 167886-76-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cytokine inhibitors, alone or in combination with other therapeutic means, for treatment of pain)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



L10 ANSWER 19 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:354722 HCPLUS

DOCUMENT NUMBER: 140:350585

TITLE: Treatment and management of myelodysplastic syndromes by administration of selective cytokine inhibitory drugs, and pharmaceutical compositions

INVENTOR(S): Zeldis, Jerome B.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

| | | | | |
|--|----|----------|-----------------|----------|
| WO 2004034962 | A2 | 20040429 | WO 2003-US11324 | 20030413 |
| WO 2004034962 | A3 | 20040805 | | |
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GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
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| CA 2501936 | AA | 20040429 | CA 2003-2501936 | 20030413 |
| EP 1551385 | A2 | 20050713 | EP 2003-726263 | 20030413 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003015316 | A | 20050816 | BR 2003-15316 | 20030413 |
| PRIORITY APPLN. INFO.: US 2002-418470P P 20021015
WO 2003-US11324 W 20030413 | | | | |

OTHER SOURCE(S) : MARPAT 140:350585

AB The invention discloses methods of treating, preventing and/or managing a myelodysplastic syndrome. Specific methods encompass the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active ingredient, and/or blood or cells for transplantation therapy. The invention also describes the use of such drugs alone or in combination with conventional therapy for myelodysplastic syndromes and/or with transplantation therapy. Specific second active ingredients are capable of affecting or improving blood cell production Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed.

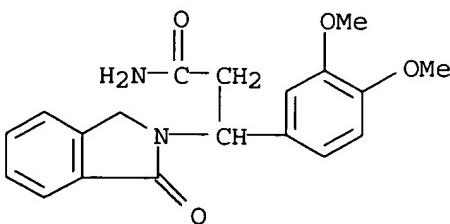
IT 167886-76-2 682359-77-9 682359-78-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treatment and management of myelodysplastic syndromes by administration of selective cytokine inhibitory drugs, and pharmaceutical compns.)

RN 167886-76-2 HCPLUS

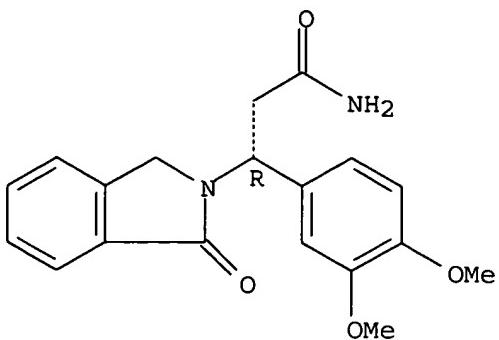
CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-
(9CI) (CA INDEX NAME)



RN 682359-77-9 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

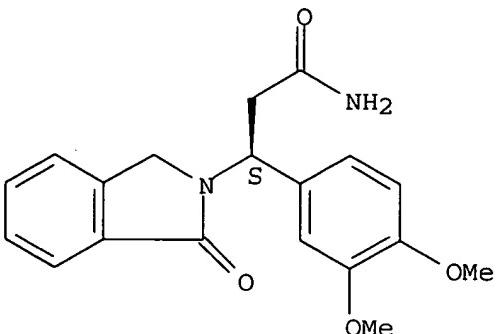
Absolute stereochemistry. Rotation (-).



RN 682359-78-0 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, (BS) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L10 ANSWER 20 OF 39 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:1001604 HCAPLUS

DOCUMENT NUMBER: 140:42030

TITLE: Preparation of isoindolinediones as angiogenesis inhibitors.

INVENTOR(S): Man, Hon-wah; Muller, George W.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: U.S., 28 pp., Cont.-in-part of U.S. Ser. No. 590,344.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

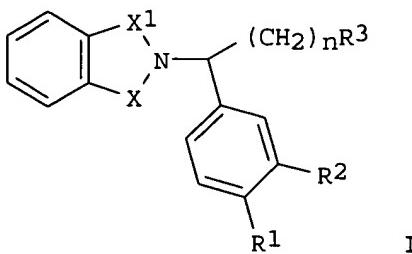
FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| US 6667316 | B1 | 20031223 | US 2000-708199 | 20001108 |
| CA 2392081 | AA | 20010517 | CA 2000-2392081 | 20001109 |
| WO 2001034606 | A1 | 20010517 | WO 2000-US30770 | 20001109 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, | | | | |

YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 EP 1228071 A1 20020807 EP 2000-977095 20001109
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 NZ 519459 A 20031128 NZ 2000-519459 20001109
 JP 2004500346 T2 20040108 JP 2001-536553 20001109
 AU 782409 B2 20050728 AU 2001-14780 20001109
 NO 2002002223 A 20020708 NO 2002-2223 20020508
 FI 2002000892 A 20020510 FI 2002-892 20020510
 US 2004147588 A1 20040729 US 2003-685942 20031014
 PRIORITY APPLN. INFO.: US 1999-165168P P 19991112
 US 2000-590344 A2 20000608
 US 2000-708199 A 20001108
 WO 2000-US30770 W 20001109

OTHER SOURCE(S) : MARPAT 140:42030
GI



AB Title compds. [I; R1, R2 = alkyl, alkoxy, cyano, cycloalkoxy, cycloalkyl, cycloalkylmethoxy; 1 of X and X1 = CO, SO₂ and the other of X and X1 = CO, CH₂, SO₂, CH₂CO; R3 = SO₂Y, CO₂, CN, hydroxyalkyl; Y = alkyl, Ph, PhCH₂; Z = NR₆₁R₇₁, alkyl, Ph, PhCH₂; R₆₁ = H, alkyl, cycloalkyl, Ph, PhCH₂, etc.; R₇₁ = alkyl; 1 of R₄, R₅ = H and the other = imidazolyl, pyrrolyl, oxadiazolyl, triazolyl, R₆R₇N(C₂H₂z); z = 0, 1; n = 1-3; R₆ = cycloalkanoyl which is unsubstituted or substituted with halo, amino, monoalkylamino, dialkylamino; R₄R₅ = NHCH₂R₈, NHCOR₈, N:CHR₈; R₇ = H, alkyl, methylsulfonyl, alkoxyalkylcarbonyl; R₈ = CH₂, O, NH, CH:CH, CH:N], were prepared for treatment of undesirable angiogenesis (no data). Thus, 3,4-dinitrophthalic acid and 2-(3-ethoxy-4-methoxyphenyl)-1-(methylsulfonyl)eth-2-ylamine in PhMe were refluxed for 15 h through a Dean-Stark trap to give 49% 2-[1-(3-Ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4,5-dinitroisoindoline-1,3-dione. This was hydrogenated in EtOAc over Pd/C to give 73% 2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4,5-diaminoisoindoline-1,3-dione. The latter was refluxed 17 h with DMF di-Me acetal in HOAc to give 68% 7-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-3-pyrrolino[3,4-e]benzimidazole-6,8-dione.

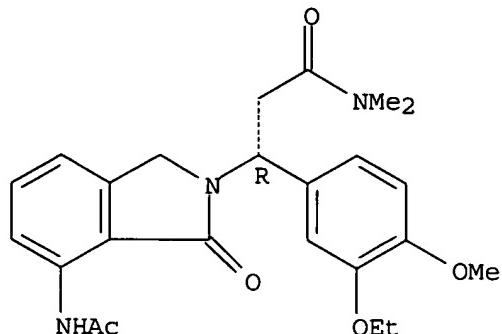
IT 340019-71-8P 340019-72-9P 635705-68-9P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of isoindolinediones as angiogenesis inhibitors)

RN 340019-71-8 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-(acetylamino)-β-(3-ethoxy-4-

methoxyphenyl)-1,3-dihydro-N,N-dimethyl-1-oxo-, (β R) - (9CI) (CA INDEX NAME)

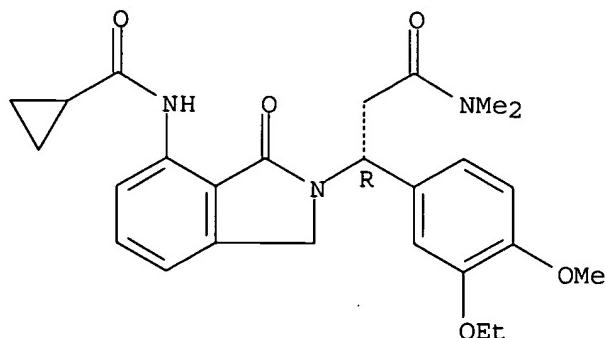
Absolute stereochemistry.



RN 340019-72-9 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]-β-(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N,N-dimethyl-1-oxo-, (β R) - (9CI) (CA INDEX NAME)

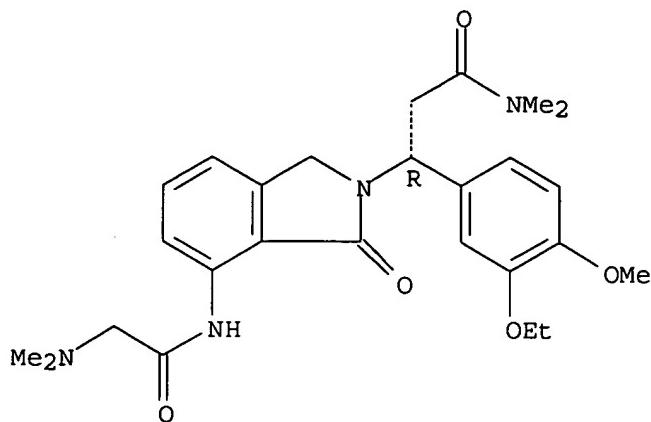
Absolute stereochemistry.



RN 635705-68-9 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[[[(dimethylamino)acetyl]amino]-β-(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N,N-dimethyl-1-oxo-, (β R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



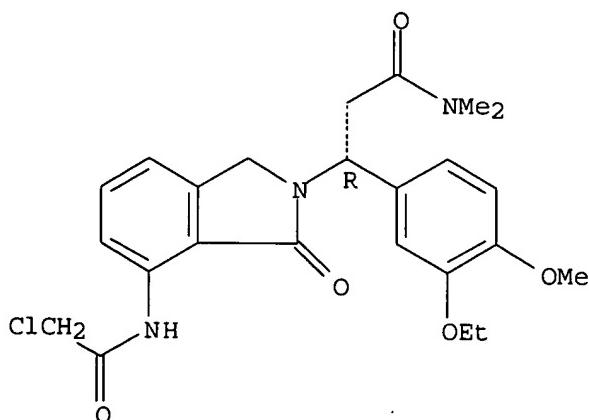
IT 340019-74-1 340020-04-4

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of isoindolinediones as angiogenesis inhibitors)

RN 340019-74-1 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-[(chloroacetyl)amino]-β-(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N,N-dimethyl-1-oxo-, (βR)- (9CI) (CA INDEX NAME)

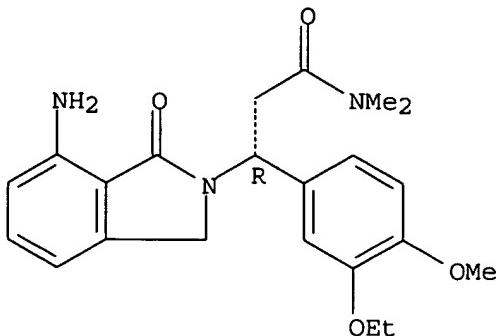
Absolute stereochemistry.



RN 340020-04-4 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-amino-β-(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N,N-dimethyl-1-oxo-, (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 21 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:931165 HCPLUS

DOCUMENT NUMBER: 139:391341

TITLE: Methods and compositions using selective cytokine inhibitory drugs for treatment and management of cancers and other diseases

INVENTOR(S): Zeldis, Jerome B.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|------------|
| WO 2003097040 | A1 | 20031127 | WO 2003-US315468 | 20030516 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2486141 | AA | 20031127 | CA 2003-2486141 | 20030516 |
| AU 2003234624 | A1 | 20031202 | AU 2003-234624 | 20030516 |
| EP 1556033 | A1 | 20050727 | EP 2003-728967 | 20030516 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2005530780 | T2 | 20051013 | JP 2004-505039 | 20030516 |
| US 2005234017 | A1 | 20051020 | US 2005-515270 | 20050523 |
| PRIORITY APPLN. INFO.: | | | US 2002-380842P | P 20020517 |
| | | | US 2002-424601P | P 20021106 |
| | | | WO 2003-US15468 | W 20030516 |

OTHER SOURCE(S): MARPAT 139:391341

AB Methods of treating, preventing and/or managing cancer as well as and diseases and disorders associated with, or characterized by, undesired

angiogenesis are disclosed. Specific methods encompass the administration of a selective cytokine inhibitory drug alone or in combination with a second active ingredient. The invention further relates to methods of reducing or avoiding adverse side effects associated with chemotherapy, radiation therapy, hormonal therapy, biol. therapy or immunotherapy which comprise the administration of a selective cytokine inhibitory drug. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed.

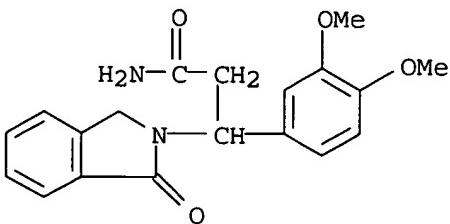
IT 167886-76-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(methods and compns. using selective cytokine inhibitory drugs for treatment and management of cancers and other diseases)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 22 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:835303 HCPLUS

DOCUMENT NUMBER: 138:378817

TITLE: Thalidomide and its analogues have distinct and opposing effects on TNF- α and TNFR2 during co-stimulation of both CD4+ and CD8+ T cells

AUTHOR(S): Marriott, J. B.; Clarke, I. A.; Dredge, K.; Muller, G.; Stirling, D.; Dalgleish, A. G.

CORPORATE SOURCE: Division of Oncology, Department of OGEM, St George's Hospital Medical School, London, UK

SOURCE: Clinical and Experimental Immunology (2002), 130(1), 75-84

PUBLISHER: CODEN: CEXIAL; ISSN: 0009-9104
Blackwell Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Thalidomide (Thd) is clin. useful in a number of conditions where its efficacy is probably related to its anti-TNF- α activity. More recently, Thd has also been shown to co-stimulate T cells and second generation co-stimulatory (IMiD) analogs are currently being assessed in the treatment of cancer patients. However, in contrast to their known suppressive effects during inflammatory stimuli, the effects of Thd/IMiDs on TNF- α and TNF receptors (TNFRs) during T cell co-stimulation are not known. We sought to determine the effect of Thd, two clin. relevant IMiDs (CC-4047, ACTIMID and CC-5013, REVIMID) and a non-stimulatory SelCID analog (CC-3052) on TNF- α production and on the expression and shedding of TNFRs during co-stimulation. We found that co-stimulation of PBMC with Thd/IMiDs, but not CC-3052, prevented α CD3-induced T cell surface

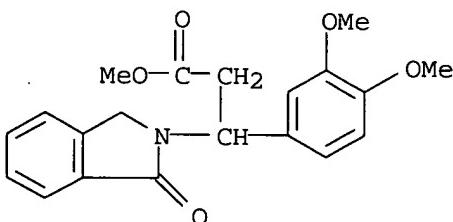
expression of TNFR2 and thereby reduced soluble TNFR2 (sTNFR2) levels. However, there was no effect on total (surface/intracellular) TNFR2 protein expression, suggesting inhibition of trafficking to the cell membrane. The extent of co-stimulation by Thd/IMiDs (assessed by CD69/CD25 expression and IL-2/sIL-2R α production) was similar for CD4+ and CD8+ T lymphocytes and correlated with TNFR2 inhibition. Co-stimulation, but not the early inhibitory effect on TNFR2, was IL-2-dependent and led to increased TNF- α production by both CD4+ and CD8+ T lymphocytes. The clin. relevance of this observation was confirmed by the elevation of serum TNF- α during REVIMID treatment of patients with advanced cancer. Together, these results suggest a possible role for TNF-mediated events during co-stimulation and contrast with the TNF inhibitory effects of Thd and its analogs during inflammatory stimuli.

IT 216884-02-5, CC 3052

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); BIOL (Biological study)

(thalidomide and its analogs distinct and opposing effects on TNF- α and TNFR2 during co-stimulation of CD4+ and CD8+ T cells)

RN 216884-02-5 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 23 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:472708 HCPLUS

DOCUMENT NUMBER: 135:76876

TITLE: Preparation of 2-(1,3,4-oxadiazol-2-yl)ethylisoindoline-1,3-diones as phosphodiesterase 4 inhibitors which decrease tumor necrosis factor- α levels

INVENTOR(S): Man, Hon-Wah; Muller, George

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

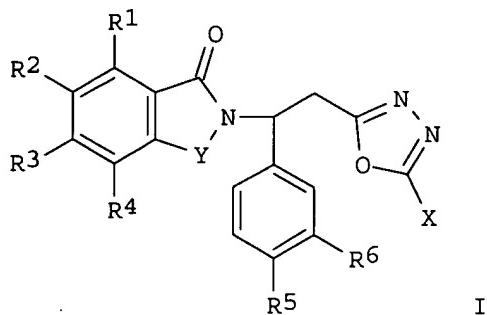
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2001046183 | A1 | 20010628 | WO 2000-US34457 | 20001219 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, | | | | |

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
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 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 US 6326388 B1 20011204 US 1999-470203 19991221
 CA 2394615 AA 20010628 CA 2000-2394615 20001219
 EP 1242413 A1 20020925 EP 2000-986568 20001219
 EP 1242413 B1 20041117
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 JP 2003518115 T2 20030603 JP 2001-547093 20001219
 EP 1462449 A1 20040929 EP 2004-3830 20001219
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 AT 282612 E 20041215 AT 2000-986568 20001219
 EP 1510518 A2 20050302 EP 2004-20108 20001219
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 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 PT 1242413 T 20050331 PT 2000-986568 20001219
 ES 2233488 T3 20050616 ES 2000-986568 20001219
 AU 782168 B2 20050707 AU 2001-22785 20001219
 NO 2002002937 A 20020815 NO 2002-2937 20020618
 FI 2002001192 A 20020619 FI 2002-1192 20020619
 HK 1050522 A1 20050902 HK 2003-101117 20030217
 PRIORITY APPLN. INFO.: US 1999-470203 A 19991221
 EP 2000-986568 A3 20001219
 WO 2000-US34457 W 20001219

OTHER SOURCE(S) : MARPAT 135:76876
 GI



AB Title compds. (I; Y = CO, CH₂, SO₂, CH₂CO; X = H, alkyl; R₁-R₄ = H, halo, CF₃, Ac, alkyl, alkoxy, NO₂, cyano, OH, CMe₃, etc.; adjacent R₁-R₄ = atoms to form with the Ph ring a naphthylidene, quinoline, quinoxaline, benzimidazole, benzodioxole, or 2-hydroxybenzimidazole ring; R₅, R₆ = H, alkyl, alkoxy, cyano, benzocycloalkoxy, cycloalkoxy, etc.), were prepared for treatment of inflammation, autoimmune disease, and cancer (no data). Thus, 3-(3-cyclopentyloxy-4-methoxyphenyl)-3-(5-methyl-1,3-dioxoisoindolin-2-yl)propanoic acid, carbonyldiimidazole, and formic hydrazide were stirred in EtOAc to give crude N-carbonylamino-3-(3-cyclopentyloxy-4-methoxyphenyl)-3-(5-methyl-1,3-dioxoisoindolin-2-yl)propanamide, which was treated with POCl₃ in MeCN to give 32% 2-[1-(3-cyclopentyloxy-4-methoxyphenyl)-2-(1,3,4-oxadiazol-2-yl)ethyl]-5-methylisoindoline-1,3-dione. Drug formulations containing the latter are given.

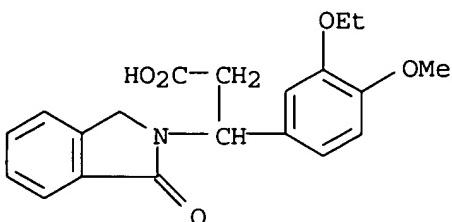
03/07/2006 10748085.trn

IT 200483-25-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of oxadiazolylethylisoindolinediones as phosphodiesterase 4
inhibitors which decrease tumor necrosis factor- α levels)

RN 200483-25-6 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

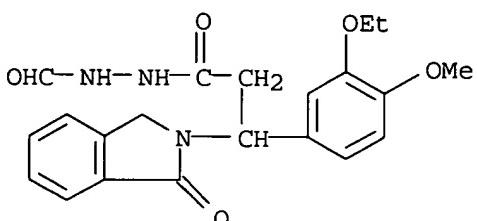


IT 347192-09-0P 347192-10-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of oxadiazolylethylisoindolinediones as phosphodiesterase 4
inhibitors which decrease tumor necrosis factor- α levels)

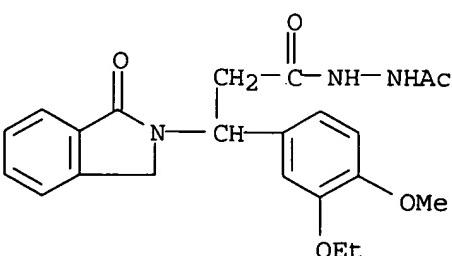
RN 347192-09-0 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, 2-formylhydrazide (9CI) (CA INDEX NAME)



RN 347192-10-3 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, 2-acetylhydrazide (9CI) (CA INDEX NAME)



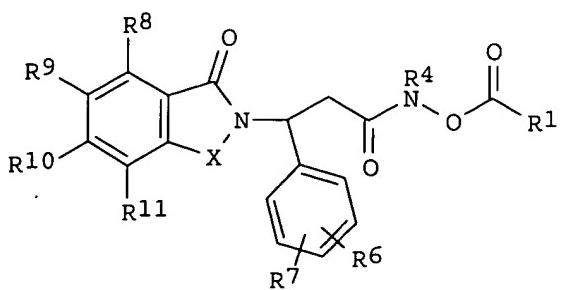
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 24 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:472490 HCPLUS
 DOCUMENT NUMBER: 135:76791
 TITLE: Preparation of 1,3-dioxoisoindolin-2-yl-N-
 acyloxypropanamides as phosphodiesterase 4 inhibitors
 which reduce undesirable levels of tumor necrosis
 factor- α .
 INVENTOR(S): Man, Hon-Wah; Muller, George; Huang, Shaei Y.
 PATENT ASSIGNEE(S): Celgene Corporation, USA
 SOURCE: PCT Int. Appl., 61 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 2001045702 | A1 | 20010628 | WO 2000-US34455 | 20001219 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6699899 | B1 | 20040302 | US 1999-468529 | 19991221 |
| CA 2394604 | AA | 20010628 | CA 2000-2394604 | 20001219 |
| EP 1246620 | A1 | 20021009 | EP 2000-988151 | 20001219 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2003518060 | T2 | 20030603 | JP 2001-546641 | 20001219 |
| NZ 519638 | A | 20030926 | NZ 2000-519638 | 20001219 |
| AU 782634 | B2 | 20050818 | AU 2001-24389 | 20001219 |
| NO 2002002936 | A | 20020814 | NO 2002-2936 | 20020618 |
| FI 2002001193 | A | 20020731 | FI 2002-1193 | 20020619 |
| US 2004167174 | A1 | 20040826 | US 2004-786822 | 20040225 |
| PRIORITY APPLN. INFO.: | | | US 1999-468529 | A 19991221 |
| | | | WO 2000-US34455 | W 20001219 |

OTHER SOURCE(S): MARPAT 135:76791
 GI



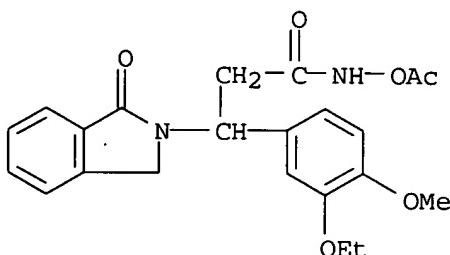
AB Title compds. (I; R₄ = H, COR12; R₁, R₁₂ = alkyl, Ph, PhCH₂, pyridyl, pyridylmethyl, imidazolyl, imidazolylmethyl, etc.; X = CO, CH₂, CH₂CO, SO₂; R₆, R₇ = NO₂, cyano, CF₃, EtO₂C, Ac, AcO, CO₂H, OH, amino, etc.; R₈-R₁₁ = H, NO₂, cyano, CF₃, EtO₂C, MeO₂C, Ac, carbamoyl, AcO, CO₂H, amino, acylamino, etc.; or R₈R₉, R₁₀R₁₁ = benzo, quinolino, quinoxalino, etc.; R₉R₁₀ = benzo), were prepared as drugs (no data). Thus, 3-(1,3-dioxoisoindolin-2-yl)-3-(3-ethoxy-4-methoxyphenyl)propanehydroxamic acid was stirred with propionic anhydride in MeCN overnight to give [3-(1,3-dioxoisoindolin-2-yl)-3-(3-ethoxy-4-methoxyphenyl)propanoylamino]propionate. Drug formulations containing the latter were given.

IT 347144-62-1P 347144-63-2P 347144-64-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1,3-dioxoisoindolin-2-yl-N-acyloxypropanamides as phosphodiesterase 4 inhibitors which reduce undesirable levels of tumor necrosis factor- α)

RN 347144-62-1 HCPLUS

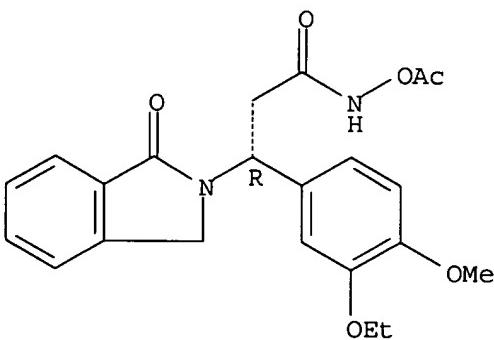
CN 2H-Isoindole-2-propanamide, N-(acetyloxy)- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 347144-63-2 HCPLUS

CN 2H-Isoindole-2-propanamide, N-(acetyloxy)- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

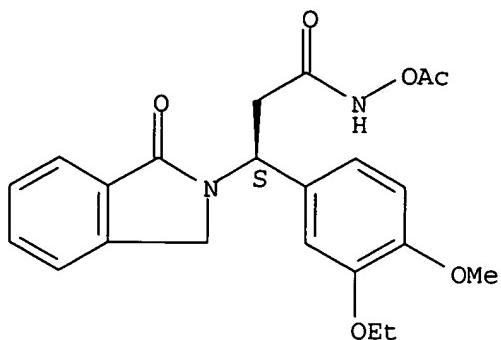
Absolute stereochemistry.



RN 347144-64-3 HCPLUS

CN 2H-Isoindole-2-propanamide, N-(acetyloxy)- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, (β S)- (9CI) (CA INDEX NAME)

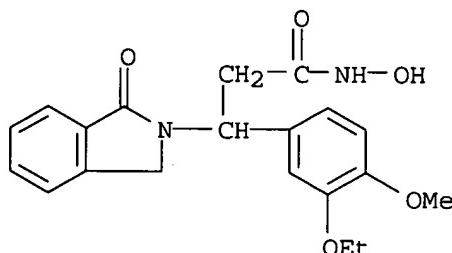
Absolute stereochemistry.



IT 220360-64-5

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of 1,3-dioxoisindolin-2-yl-N-acycloxypropanamides as
 phosphodiesterase 4 inhibitors which reduce undesirable levels of tumor
 necrosis factor-α)

RN 220360-64-5 HCPLUS

CN 2H-Isoindole-2-propanamide, β-(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-
 N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 25 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:452859 HCPLUS

DOCUMENT NUMBER: 135:51096

TITLE: Compositions for the prevention and treatment of
 atherosclerosis and restenosis

INVENTOR(S): Zeldis, Jerome B.

PATENT ASSIGNEE(S): Celgene Corp., USA

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2001043743 | A1 | 20010621 | WO 2000-US33708 | 20001213 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, | | | | |

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
ZA, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 US 2002054899 A1 20020509 US 2000-734460 20001211
 CA 2395474 AA 20010621 CA 2000-2395474 20001213
 AU 2001020916 A5 20010625 AU 2001-20916 20001213
 AU 782753 B2 20050825
 EP 1242082 A1 20020925 EP 2000-984269 20001213
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 JP 2003517012 T2 20030520 JP 2001-544881 20001213
 US 2006004054 A1 20060105 US 2005-216950 20050830
 PRIORITY APPLN. INFO.: US 1999-170820P P 19991215
 US 2000-734460 A3 20001211
 WO 2000-US33708 W 20001213

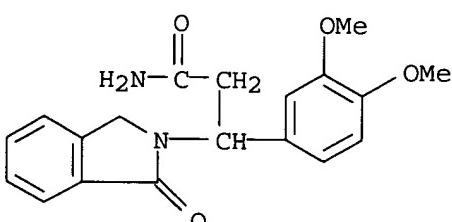
AB Methods and compns. for the prevention and treatment of all forms of atherosclerosis are described. Administration of compds. such as thalidomide, its analogs, hydrolysis products, metabolites, derivs. and precursors as well as addnl. compds. capable of inhibiting tumor necrosis factor- α (TNF- α) are used in the invention. Also disclosed is the coating of prosthetic devices, such as stents, with the compds. of the invention for the prevention and/or treatment of restenosis. Tablets contained 1-oxo-2-(2,6-dioxopiperidin-3-yl)-4-aminoisoindoline 50.0, lactose 50.7, wheat starch 7.5, PEG-6000 5.0, talc 5.0, and Mg stearate 1.8 and water qs.

IT 167886-76-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. for prevention and treatment of atherosclerosis and restenosis)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 26 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:359998 HCPLUS

DOCUMENT NUMBER: 134:366799

TITLE: Preparation of isoindolinones for treatment of phosphodiesterase- and TNF α -mediated diseases

INVENTOR(S): Man, Hon-Wah; Muller, George

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 94 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

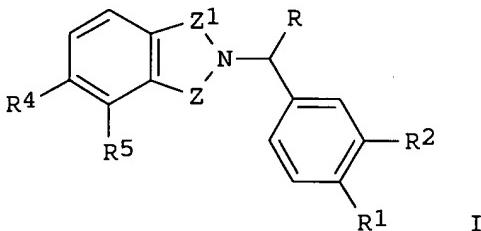
FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2001034606 | A1 | 20010517 | WO 2000-US30770 | 20001109 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6667316 | B1 | 20031223 | US 2000-708199 | 20001108 |
| CA 2392081 | AA | 20010517 | CA 2000-2392081 | 20001109 |
| EP 1228071 | A1 | 20020807 | EP 2000-977095 | 20001109 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| NZ 519459 | A | 20031128 | NZ 2000-519459 | 20001109 |
| JP 2004500346 | T2 | 20040108 | JP 2001-536553 | 20001109 |
| AU 782409 | B2 | 20050728 | AU 2001-14780 | 20001109 |
| NO 2002002223 | A | 20020708 | NO 2002-2223 | 20020508 |
| FI 2002000892 | A | 20020510 | FI 2002-892 | 20020510 |
| PRIORITY APPLN. INFO.: | | | US 1999-165168P | P 19991112 |
| | | | US 2000-590344 | A 20000608 |
| | | | US 2000-708199 | A 20001108 |
| | | | WO 2000-US30770 | W 20001109 |

OTHER SOURCE(S) : MARPAT 134:366799

GI



AB Title compds. [I; R = (C_nH_{2n})R₃; R₁,R₂ = (cyclo)alkyl(oxy), cyano, cycloalkylmethoxy; R₃ = hydroxyalkyl, cyano, SO₂R₆, COR₇; 1 of R₄,R₅ = H and the other = pyrrolyl, imidazolyl, (un)substituted amino(alkyl), etc.; R₄,R₅ = (un)substituted amino(alkyl); R₄R₅ = atoms to complete a ring; R₆ = alkyl, Ph, CH₂Ph; R₇ = groups cited for R₆, (un)substituted amino; 1 of Z,Z₁ = CO or SO₂ and the other = CH₂, CO, SO₂, CH₂CO; n = 1-3] were prepared for treatment of phosphodiesterase- and TNF α -mediated diseases (no data). Thus, 3,4-dinitrophthalic acid was cyclocondensed with H₂NCH(CH₂SO₂Me)C₆H₃(OEt)-3,4 and the product reduced to give I (R = CH₂SO₂Me, R₁ = OMe, R₂ = OEt, R₄ = R₅ = NH₂, Z = Z₁ = CO).

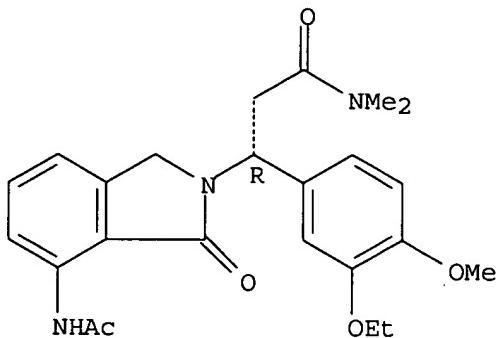
IT 340019-71-8P 340019-72-9P 340019-74-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of isoindolinones for treatment of phosphodiesterase- and TNF α -mediated diseases)

RN 340019-71-8 HCAPLUS

CN 2H-Isoindole-2-propanamide, 7-(acetylamino)- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N,N-dimethyl-1-oxo-, (β R) - (9CI) (CA INDEX NAME)

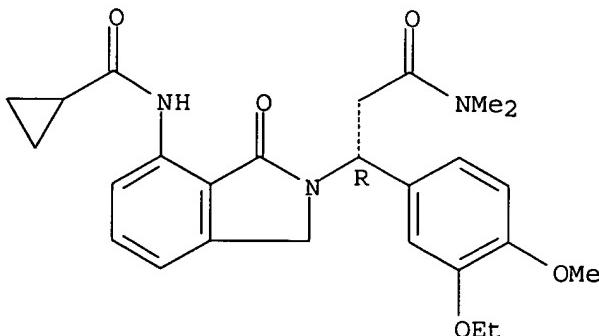
Absolute stereochemistry.



RN 340019-72-9 HCAPLUS

CN 2H-Isoindole-2-propanamide, 7-[(cyclopropylcarbonyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N,N-dimethyl-1-oxo-, (β R) - (9CI) (CA INDEX NAME)

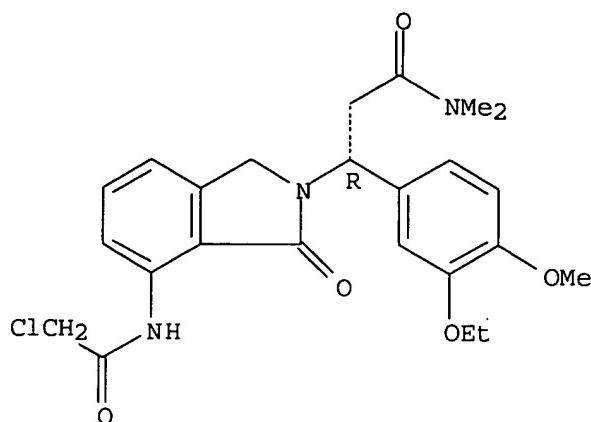
Absolute stereochemistry.



RN 340019-74-1 HCAPLUS

CN 2H-Isoindole-2-propanamide, 7-[(chloroacetyl)amino]- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N,N-dimethyl-1-oxo-, (β R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



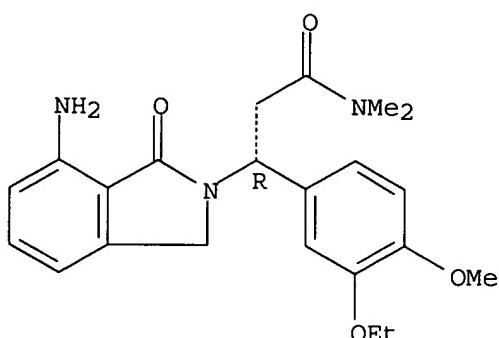
IT 340020-04-4

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of isoindolinones for treatment of phosphodiesterase- and
 TNF α -mediated diseases)

RN 340020-04-4 HCPLUS

CN 2H-Isoindole-2-propanamide, 7-amino- β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N,N-dimethyl-1-oxo-, (β R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 27 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:255928 HCPLUS

DOCUMENT NUMBER: 134:280706

TITLE: Preparation of isoindolylhydroxypropionamides for reduction of tumor necrosis factor- α levels.

INVENTOR(S): Muller, George W.; Man, Hon-Wah

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: U.S., 17 pp., Cont.-in-part of U.S. Ser. No. 903,975, abandoned.

CODEN: USXXAM

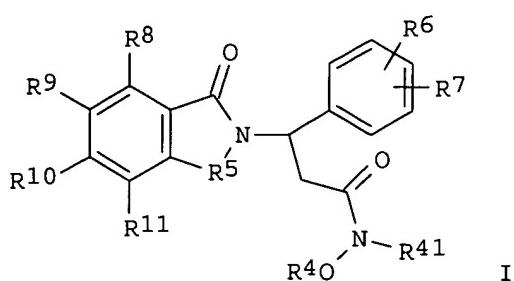
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|-------------------|----------|-------------------|-------------|
| US 6214857 | B1 | 20010410 | US 1998-126157 | 19980730 |
| TR 200000221 | T2 | 20000921 | TR 2000-200000221 | 19980730 |
| PT 1035848 | T | 20030930 | PT 1998-938151 | 19980730 |
| ES 2196592 | T3 | 20031216 | ES 1998-938151 | 19980730 |
| MX 200001018 | A | 20001110 | MX 2000-1018 | 20000128 |
| US 2001049371 | A1 | 20011206 | US 2001-780725 | 20010209 |
| US 6656964 | B2 | 20031202 | | |
| US 2004006096 | A1 | 20040108 | US 2003-462319 | 20030616 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1997-903975 | B2 19970731 |
| | | | US 1998-126157 | A3 19980730 |
| | | | US 2000-590344 | A3 20000608 |
| | | | US 2001-780725 | A1 20010209 |
| OTHER SOURCE(S) : | MARPAT 134:280706 | | | |
| GI | | | | |



AB Title compds. e.g., (I; R4, R41 = H, alkyl; R5 = CO, CH2; R6, R7 = NO₂, cyano, CF₃, EtO₂C, MeO₂C, Ac, AcO, CO₂H, OH, alkyl, etc.; R8-R11 = H, NO₂, cyano, CF₃, EtO₂C, MeO₂C, Ac, AcO, CO₂H, OH, amino, acylamino, alkyl, etc.), were prepared for reduction of TNF- α levels (no data). Thus, 3-(3-ethoxy-4-methoxyphenyl)-3-(1-oxoisoindolinyl)propanoic acid and carbonyldiimidazole were stirred 2 h in THF; NH₂OH.HCl was added and the resulting suspension was stirred 18 h to give 82% 3-(3-ethoxy-4-methoxyphenyl)-N-hydroxy-3-(1-oxoisoindolinyl)propionamide. I drug formulations are given.

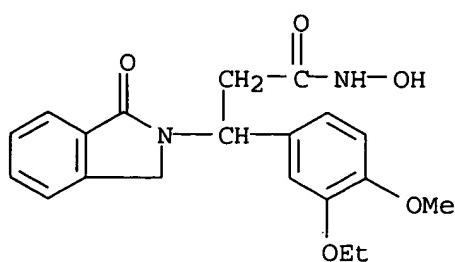
IT 220360-64-5P 220360-68-9P 220360-70-3P
 220360-73-6P 220360-80-5P 220360-81-6P
 220360-84-9P 333366-51-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of isoindolylhydroxypropionamides for reduction of tumor necrosis

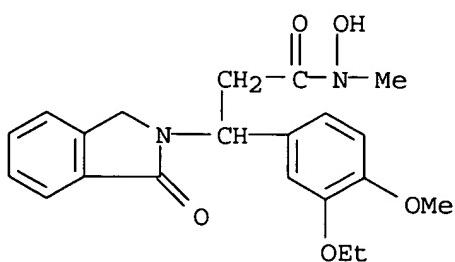
factor- α levels)

RN 220360-64-5 HCPLUS

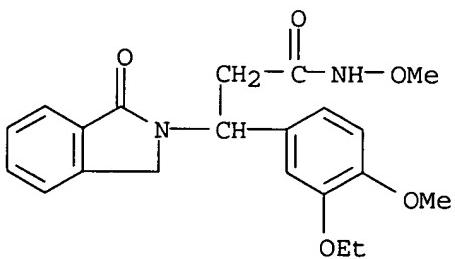
CN 2H-Isoindole-2-propanamide, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)



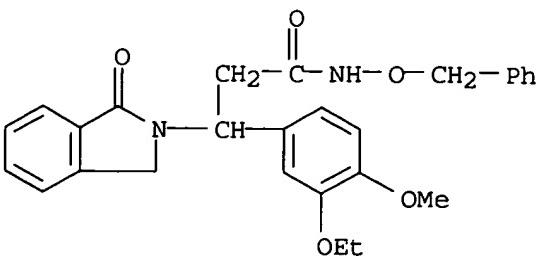
RN 220360-68-9 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-hydroxy-N-methyl-1-oxo- (9CI) (CA INDEX NAME)

RN 220360-70-3 HCAPLUS

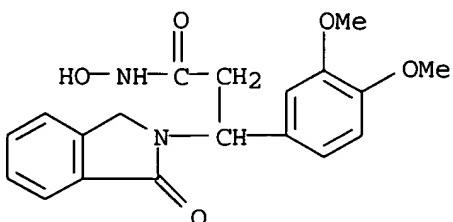
CN 2H-Isoindole-2-propanamide, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-methoxy-1-oxo- (9CI) (CA INDEX NAME)

RN 220360-73-6 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-N-(phenylmethoxy)- (9CI) (CA INDEX NAME)

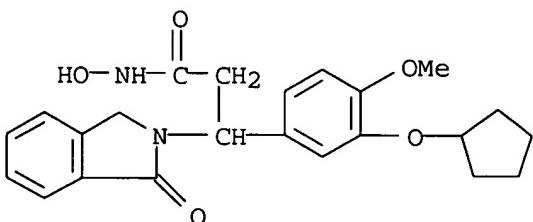
RN 220360-80-5 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)



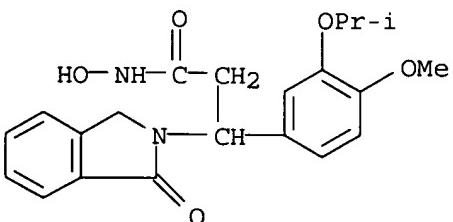
RN 220360-81-6 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -[3-(cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)



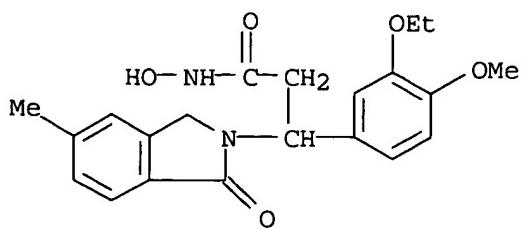
RN 220360-84-9 HCAPLUS

CN 2H-Isoindole-2-propanamide, 1,3-dihydro-N-hydroxy- β -[4-methoxy-3-(1-methylethoxy)phenyl]-1-oxo- (9CI) (CA INDEX NAME)



RN 333366-51-1 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-hydroxy-5-methyl-1-oxo- (9CI) (CA INDEX NAME)

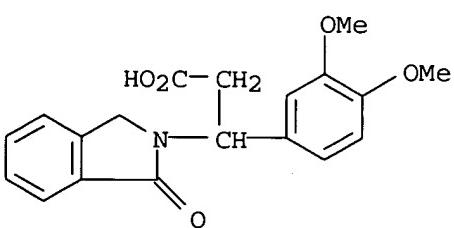


IT 167886-75-1 192819-48-0 200483-25-6
220361-19-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of isoindolylhydroxypropionamides for reduction of tumor necrosis factor- α levels)

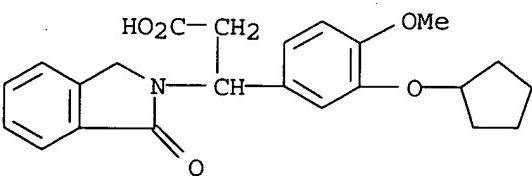
RN 167886-75-1 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



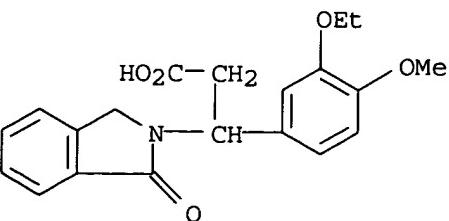
RN 192819-48-0 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -[3-(cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

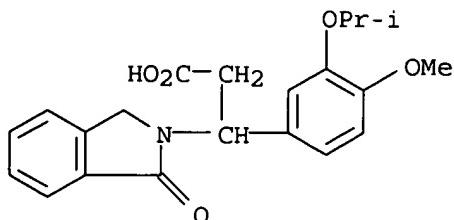


RN 200483-25-6 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 220361-19-3 HCPLUS
 CN 2H-Isoindole-2-propanoic acid, 1,3-dihydro- β -[4-methoxy-3-(1-methylethoxy)phenyl]-1-oxo- (9CI) (CA INDEX NAME)



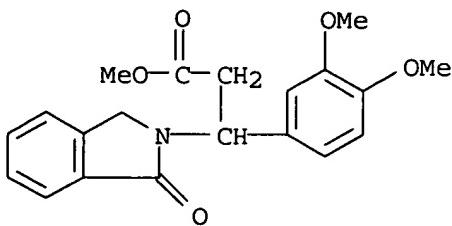
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 28 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2000:670337 HCPLUS
 DOCUMENT NUMBER: 134:157330
 TITLE: Thalidomide analogue CC-3052 reduces HIV+ neutrophil apoptosis in vitro
 AUTHOR(S): Guckian, M.; Dransfield, I.; Hay, P.; Dalgleish, A. G.
 CORPORATE SOURCE: Division of Oncology, St George's Hospital Medical School, London, SW17 ORE, UK
 SOURCE: Clinical and Experimental Immunology (2000), 121(3), 472-479
 CODEN: CEXIAL; ISSN: 0009-9104
 PUBLISHER: Blackwell Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Recently, water-soluble analogs of thalidomide with significantly greater immunomodulatory activity and reduced side-effects than thalidomide itself have become available. The effect of thalidomide and one analog, CC-3052, on neutrophil apoptosis was examined following culture for 20 h in vitro. Apoptosis was assessed by measuring reduced CD16 expression and Annexin V binding by flow cytometry. Neither thalidomide nor CC-3052 alone had any effect on neutrophil apoptosis when used at physiol. concns. However, when used together with PGE2 (10-7M), a potent adenylate cyclase activator, CC-3052 but not thalidomide (both 10-5M) reduced apoptosis in neutrophils from normal and HIV+ donors. The reduced apoptosis could not be attributed to the ability of CC-3052 to reduce tumor necrosis factor- α (TNF- α) production, but may have been due to its PDE4 inhibitor properties, as it increased intracellular cAMP and mimicked the effect of dibutyryl cAMP, a membrane-permeable analog of cAMP, in increasing intracellular cAMP. The results suggest a role for thalidomide analog CC-3052 in reducing the persistent activation of the TNF- α system in HIV+ patients without markedly impairing neutrophil viability.

IT 216884-02-5, CC 3052
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (thalidomide analog CC-3052 reduction of apoptosis by neutrophils from HIV-pos. humans)

RN 216884-02-5 HCPLUS
 CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 29 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:106172 HCPLUS

DOCUMENT NUMBER: 133:26504

TITLE: The thalidomide analogue CC-3052 inhibits HIV-1 and tumor necrosis factor-alpha (TNF- α) expression in acutely and chronically infected cells in vitro

AUTHOR(S): La Maestra, L.; Zaninoni, A.; Marriott, J. B.; Lazzarin, A.; Dalgleish, A. G.; Barcellini, W.

CORPORATE SOURCE: Division of Hematology, IRCCS Ospedale Maggiore, Milan, 20122, Italy

SOURCE: Clinical and Experimental Immunology (2000), 119(1), 123-129

CODEN: CEXIAL; ISSN: 0009-9104
PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We investigated the in vitro effect of the water-soluble, highly stable thalidomide analog CC-3052 on HIV-1 expression and TNF- α production in latently infected promonocytic U1 cells, acutely infected T cells and monocyte-derived human macrophages (MDM), and in mitogen-stimulated ex vivo cultures from patients with primary acute HIV-1 infection. HIV-1 expression was assessed by Northern blot anal. of RNAs, and ELISA for p24 antigen release and reverse transcriptase (RT) activity. TNF- α expression was evaluated by RT-polymerase chain reaction (PCR)-ELISA for mRNA and ELISA for protein secretion. We demonstrated that CC-3052 is able to inhibit HIV-1 expression, as evaluated by mRNA, p24 release and RT activity, in phorbol myristate acetate (PMA)- and cytokine-stimulated U1 cells. Furthermore, CC-3052 inhibited HIV-1 expression, as evaluated by p24 and RT activity, in acutely infected MDM and T cells. As far as TNF- α is concerned, CC-3052 significantly reduced TNF- α mRNA and protein secretion in PMA-stimulated U937 and U1 cells, and in PMA-stimulated uninfected and acutely infected MDM. Consistently, the addition of CC-3052 reduced TNF- α production in phytohemagglutinin (PHA) and lipopolysaccharide (LPS)-stimulated whole blood cultures from patients during the primary acute phase of HIV-1 infection. Since TNF- α is among the most potent enhancers of HIV-1 expression, the effect of CC-3052 on TNF- α may account for its inhibitory activity on HIV-1 expression. Given the well documented immunopathol. role of TNF- α and its correlation with viral load, advanced disease and poor prognosis, CC-3052 could be an interesting drug for the design of therapeutic strategies in association with anti-retroviral agents.

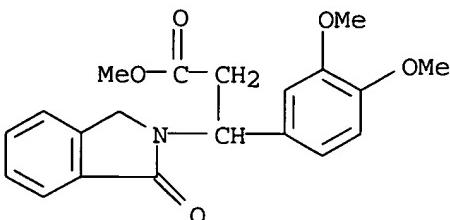
IT 216884-02-5, CC 3052

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(thalidomide analog CC-3052 inhibits HIV-1 and tumor necrosis factor-alpha expression in acutely and chronically infected cells in vitro)

RN 216884-02-5 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 30 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:420122 HCPLUS

DOCUMENT NUMBER: 131:193916

TITLE: Differential cytokine modulation and T cell activation by two distinct classes of thalidomide analogs that are potent inhibitors of TNF- α

AUTHOR(S): Corral, Laura G.; Haslett, Patrick A. J.; Muller, George W.; Chen, Roger; Wong, Lu-Min; Ocampo, Christopher J.; Patterson, Rebecca T.; Stirling, David I.; Kaplan, Gilla

CORPORATE SOURCE: Celgene Corporation, Warren, NJ, 07059, USA

SOURCE: Journal of Immunology (1999), 163(1), 380-386

CODEN: JOIMA3; ISSN: 0022-1767

PUBLISHER: American Association of Immunologists

DOCUMENT TYPE: Journal

LANGUAGE: English

AB TNF- α mediates both protective and detrimental manifestations of the host immune response. Previous work has shown thalidomide to be a relatively selective inhibitor of TNF- α production in vivo and in vitro. Addnl., it has been recently reported that thalidomide exerts a costimulatory effect on T cell responses. To develop thalidomide analogs with increased anti-TNF- α activity and reduced or absent toxicities, novel TNF- α inhibitors were designed and synthesized. When a selected group of these compds. was examined for their immunomodulatory activities, different patterns of cytokine modulation were revealed. The tested compds. segregated into two distinct classes: one class of compds., shown to be potent phosphodiesterase 4 inhibitors, inhibited TNF- α production, increased IL-10 production by LPS-induced PBMC, and had little effect

on T cell activation; the other class of compds., similar to thalidomide, were not phosphodiesterase 4 inhibitors and markedly stimulated T cell proliferation and IL-2 and IFN- γ production. These compds. inhibited TNF- α , IL-1 β , and IL-6 and greatly increased IL-10 production by LPS-induced PBMC. Similar to thalidomide, the effect of these agents on IL-12 production was dichotomous; IL-12 was inhibited when PBMC were stimulated with LPS but increased when cells were stimulated by crosslinking the TCR. The latter effect was associated with increased T cell CD40 ligand expression. The distinct immunomodulatory activities of these

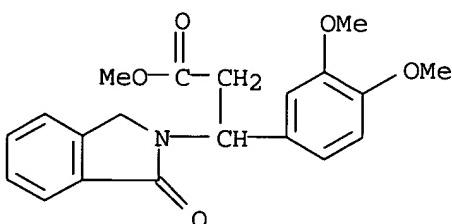
classes of thalidomide analogs may potentially allow them to be used in the clinic for the treatment of different immunopathol. disorders.

IT 216884-02-5, CC 3052

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(CC 3052; differential cytokine modulation and T cell activation by thalidomide analogs as inhibitors of TNF α)

RN 216884-02-5 HCAPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 31 OF 39 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:113548 HCAPLUS

DOCUMENT NUMBER: 130:168235

TITLE: Substituted alkanohydroxamic acids and method of reducing TNF α levels

INVENTOR(S): Muller, George W.; Man, Hon-Wah

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-------------------|----------|
| WO 9906041 | A1 | 19990211 | WO 1998-US15868 | 19980730 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2295295 | AA | 19990211 | CA 1998-2295295 | 19980730 |
| AU 9886741 | A1 | 19990222 | AU 1998-86741 | 19980730 |
| AU 737008 | B2 | 20010809 | | |
| EP 1035848 | A1 | 20000920 | EP 1998-938151 | 19980730 |
| EP 1035848 | B1 | 20030423 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI | | | | |
| TR 200000221 | T2 | 20000921 | TR 2000-200000221 | 19980730 |

| | | | | |
|------------------------|----|----------|-----------------|------------|
| BR 9815895 | A | 20010116 | BR 1998-15895 | 19980730 |
| JP 2001511448 | T2 | 20010814 | JP 2000-504855 | 19980730 |
| NZ 502379 | A | 20021025 | NZ 1998-502379 | 19980730 |
| RU 2199530 | C2 | 20030227 | RU 2000-102639 | 19980730 |
| AT 238052 | E | 20030515 | AT 1998-938151 | 19980730 |
| PT 1035848 | T | 20030930 | PT 1998-938151 | 19980730 |
| ES 2196592 | T3 | 20031216 | ES 1998-938151 | 19980730 |
| NO 9906529 | A | 20000328 | NO 1999-6529 | 19991228 |
| NO 315043 | B1 | 20030630 | | |
| FI 2000000061 | A | 20000302 | FI 2000-61 | 20000112 |
| MX 200001018 | A | 20001110 | MX 2000-1018 | 20000128 |
| PRIORITY APPLN. INFO.: | | | US 1997-903975 | A 19970731 |
| | | | WO 1998-US15868 | W 19980730 |

OTHER SOURCE(S): MARPAT 130:168235

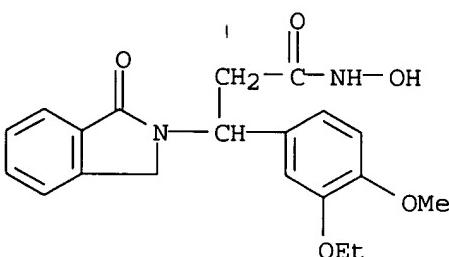
AB Ioxoisooindolinylpropionamides and phthalimidopropionamidemidos were prepared and reduce the levels of TNF α and inhibit phosphodiesterase in a mammal. A typical embodiment is 3-(3-cyclopentyloxy-4-methoxyphenyl)-N-hydroxy-3-phthalimidopropionamide which was prepared by the reaction of 3-amino-(3-(3-cyclopentyloxy-4-methoxyphenyl))propionic acid and NH₂OH.HCl.

IT 220360-64-5P 220360-68-9P 220360-70-3P
 220360-73-6P 220360-80-5P 220360-81-6P
 220360-84-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation and reduction of TNF α levels and inhibition of phosphodiesterase)

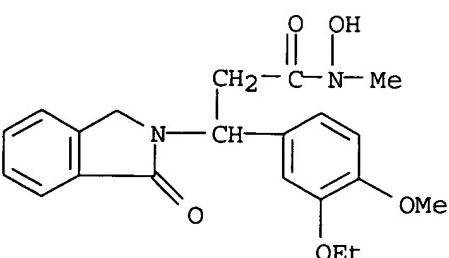
RN 220360-64-5 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)

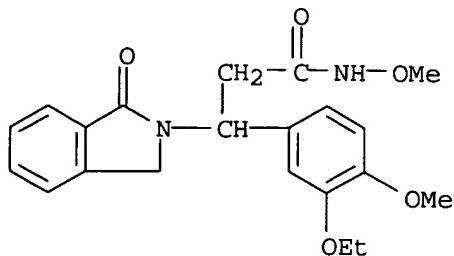


RN 220360-68-9 HCPLUS

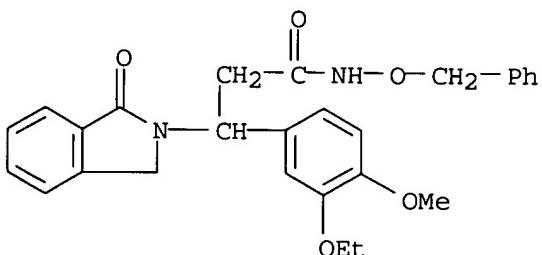
CN 2H-Isoindole-2-propanamide, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-hydroxy-N-methyl-1-oxo- (9CI) (CA INDEX NAME)



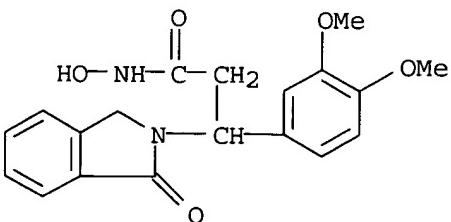
RN 220360-70-3 HCPLUS
CN 2H-Isoindole-2-propanamide, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-N-methoxy-1-oxo- (9CI) (CA INDEX NAME)



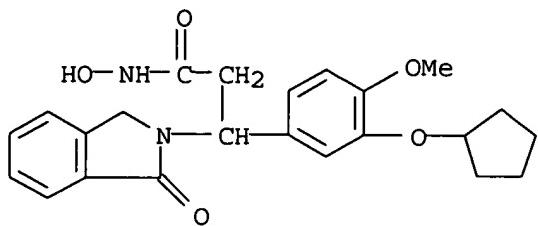
RN 220360-73-6 HCPLUS
CN 2H-Isoindole-2-propanamide, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-N-(phenylmethoxy)- (9CI) (CA INDEX NAME)



RN 220360-80-5 HCPLUS
CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)

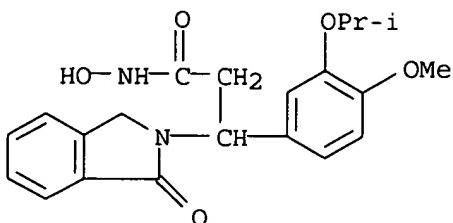


RN 220360-81-6 HCPLUS
CN 2H-Isoindole-2-propanamide, β -[3-(cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-N-hydroxy-1-oxo- (9CI) (CA INDEX NAME)



RN 220360-84-9 HCPLUS

CN 2H-Isoindole-2-propanamide, 1,3-dihydro-N-hydroxy-β-[4-methoxy-3-(1-methylethoxy)phenyl]-1-oxo- (9CI) (CA INDEX NAME)



IT 167886-75-1 192819-48-0 200483-25-6

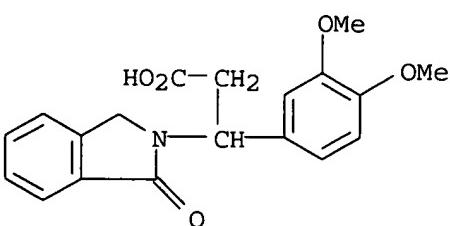
220361-19-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant for preparation of oxoisoindolinylpropionamides/phthalimidopropion amides for reduction of TNF α levels and inhibition of phosphodiesterase)

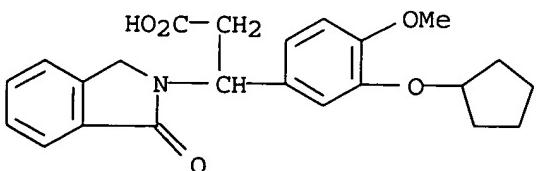
RN 167886-75-1 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β-(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

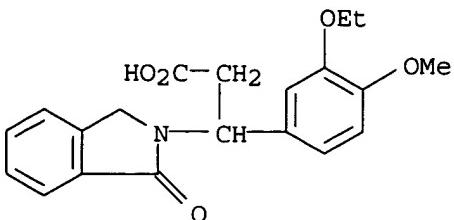


RN 192819-48-0 HCPLUS

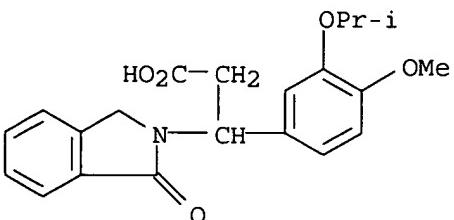
CN 2H-Isoindole-2-propanoic acid, β-[3-(cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 200483-25-6 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

RN 220361-19-3 HCPLUS

CN 2H-Isoindole-2-propanoic acid, 1,3-dihydro- β -[4-methoxy-3-(1-methylethoxy)phenyl]-1-oxo- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 32 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:659096 HCPLUS

DOCUMENT NUMBER: 130:47246

TITLE: CC-3052: A water-soluble analog of thalidomide and potent inhibitor of activation-induced TNF- α production

AUTHOR(S): Marriott, J. Blake; Westby, Michael; Cookson, Sharon; Guckian, Mary; Goodbourn, Steve; Muller, George;

CORPORATE SOURCE: Shire, Mary G.; Stirling, David; Dagleish, Angus G. Div. Oncology, St. George's Hospital Med. School, London, UK

SOURCE: Journal of Immunology (1998), 161(8), 4236-4243

CODEN: JOIMA3; ISSN: 0022-1767

PUBLISHER: American Association of Immunologists

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The immunomodulatory drug thalidomide has been shown to be clin. useful in a number of situations due to its ability to inhibit TNF- α synthesis. However, its use is restricted by potentially serious side effects, including teratogenicity and neurotoxicity; furthermore, insoly. may present problems in terms of systemic bioavailability. Recently, structural modifications of thalidomide have been designed enabling greatly enhanced anti-TNF- α activity in LPS-treated mice. In contrast to thalidomide (LPS-induced TNF- α IC₅₀ apprx.200 μ M in DMSO) and other analogs tested, one of these compds., CC-3052 (IC₅₀

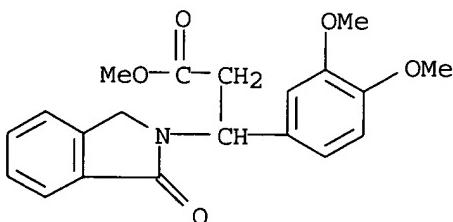
.apprx.1 μ M in water), is water soluble. Furthermore, this analog exhibits increased stability in human plasma ($t_{1/2}$.apprx.17.5 vs. 1.5 h for thalidomide) and appears to be nontoxic, nonmutagenic, and nonteratogenic. At pharmacol. active levels, cellular proliferation and LPS-induced IL-6 mRNA and IL-12p40 mRNA (as well as IL-1 β and IL-6 protein levels) in whole blood cultures were not affected; apparent inhibition of NK activity by CC-3052 was reversed upon addition of exogenous rTNF- α . In addition, IL-10 mRNA and protein levels were increased. These properties are consistent with results indicating inhibition of phosphodiesterase type IV activity by CC-3052. Furthermore, CC-3052 did not increase the degradation rate of macrophage TNF- α transcripts nor inhibit LPS-induced primary macrophage NF- κ B activation. Taken together, the potency of selective TNF- α inhibition, water solubility, and increased plasma stability make CC-3052 an excellent candidate for further development and clin. evaluation for the treatment of TNF- α -mediated disease.

IT 216884-02-5, CC 3052

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(water-soluble thalidomide analog CC-3052 as inhibitor of activation-induced TNF- α production)

RN 216884-02-5 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 33 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:186516 HCPLUS

DOCUMENT NUMBER: 128:230243

TITLE: Preparation of 3-phthalimido-3-(3-cyclopentyloxy-4-methoxyphenyl)propionamide and related compounds as immunotherapeutic agents

INVENTOR(S): Muller, George W.; Shire, Mary

PATENT ASSIGNEE(S): Celgene Corp., USA

SOURCE: U.S., 10 pp., Cont.-in-part of U.S. Ser. No. 520,710.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

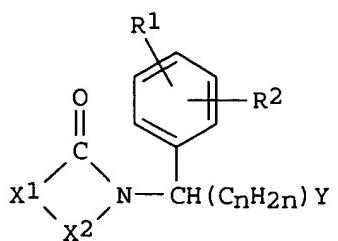
FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 5728844 | A | 19980317 | US 1995-578738 | 19951226 |
| US 5728845 | A | 19980317 | US 1995-520710 | 19950829 |
| CA 2230487 | AA | 19970306 | CA 1996-2230487 | 19960829 |

| | | | | |
|--|----|-----------------|-----------------|----------|
| EP 957091 | A1 | 19991117 | EP 1999-200946 | 19960829 |
| EP 957091 | B1 | 20030604 | | |
| R: GB | | | | |
| CZ 291613 | B6 | 20030416 | CZ 1998-609 | 19960829 |
| EP 1367051 | A2 | 20031203 | EP 2003-77311 | 19960829 |
| EP 1367051 | A3 | 20031217 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI | | | | |
| PT 851857 | T | 20040730 | PT 1996-930664 | 19960829 |
| ES 2216059 | T3 | 20041016 | ES 1996-930664 | 19960829 |
| CA 2241688 | AA | 19970703 | CA 1996-2241688 | 19961224 |
| WO 9723457 | A1 | 19970703 | WO 1996-US20616 | 19961224 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,
LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
MR, NE, SN, TD, TG | | | | |
| AU 9714685 | A1 | 19970717 | AU 1997-14685 | 19961224 |
| AU 723331 | B2 | 20000824 | | |
| EP 874819 | A1 | 19981104 | EP 1996-945277 | 19961224 |
| EP 874819 | B1 | 20040526 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| CN 1206405 | A | 19990127 | CN 1996-199413 | 19961224 |
| CN 1092640 | B | 20021016 | | |
| JP 2000502350 | T2 | 20000229 | JP 1997-523858 | 19961224 |
| RU 2174512 | C2 | 20011010 | RU 1998-113943 | 19961224 |
| IL 125086 | A1 | 20021110 | IL 1996-125086 | 19961224 |
| AT 267806 | E | 20040615 | AT 1996-945277 | 19961224 |
| EP 1468991 | A1 | 20041020 | EP 2004-76505 | 19961224 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, AL | | | | |
| PT 874819 | T | 20041029 | PT 1996-945277 | 19961224 |
| ES 2222487 | T3 | 20050201 | ES 1996-945277 | 19961224 |
| US 5968945 | A | 19991019 | US 1998-7135 | 19980114 |
| FI 9801437 | A | 19980825 | FI 1998-1437 | 19980622 |
| US 6180644 | B1 | 20010130 | US 1999-330701 | 19990611 |
| HK 1017620 | A1 | 20030516 | HK 1999-102856 | 19990706 |
| HK 1022692 | A1 | 20031031 | HK 2000-101665 | 20000320 |
| US 2002002188 | A1 | 20020103 | US 2001-909506 | 20010720 |
| US 6518281 | B2 | 20030211 | | |
| US 2003114516 | A1 | 20030619 | US 2002-316673 | 20021211 |
| US 2005096355 | A1 | 20050505 | US 2004-2488 | 20041203 |
| US 2006003979 | A1 | 20060105 | US 2005-210693 | 20050825 |
| PRIORITY APPLN. INFO.: | | | | |
| | | US 1995-520710 | A2 | 19950829 |
| | | US 1995-578738 | A | 19951226 |
| | | EP 1996-930664 | A3 | 19960829 |
| | | EP 1996-945277 | A3 | 19961224 |
| | | WO 1996-US20616 | W | 19961224 |
| | | US 1998-7135 | A3 | 19980114 |
| | | US 1999-366985 | A1 | 19990804 |
| | | US 2001-909506 | A1 | 20010720 |
| | | US 2002-316673 | B1 | 20021211 |
| | | US 2004-2488 | B1 | 20041203 |

OTHER SOURCE(S) : MARPAT 128:230243
GI



AB Novel amides [I; 1 of R1, R2 = R3X, the other = H, OH, NO₂, alkyl, amino, cyano, CF₃, alkoxy carbonyl, MeCO, R3X, etc.; R3 = C≤18 (bi)cycloalkyl, C≤18 benzocycloalkyl; X = CC bond, CH₂O; X1 = (un)substituted o-phenylene; X2 = CO, CH₂, CH₂CO; Y = COR₃, cyano, OR₄, alkyl, aryl; R3 = NH₂, OH, etc.; R4 = H, alkyl; n = 0-4] are inhibitors of TNF α and phosphodiesterase (no data) and can be used for treatment of cachexia, endotoxic shock, retrovirus replication, asthma, and inflammatory conditions. For example, condensation of 10.0 g 3-cyclopentyloxy-4-methoxybenzaldehyde with 4.72 g CH₂(CO₂H)₂ in the presence of 7.00 g NH₄OAc in 30 mL EtOH gave 58% 3-amino-3-(3-cyclopentyloxy-4-methoxyphenyl)propionic acid which (2.34 g) was stirred for 3 h with 1.9 g N-carbethoxyphthalimide and 0.96 g Na₂CO₃ in a mixture of 20 mL H₂O and 20 mL MeCN under N to give 85% 3-phthalimido derivative. This (2.05 g) was stirred for 1.5 h under N with 0.91 g 1,1'-carbonyldiimidazole and a trace of 4-dimethylaminopyridine in 20 mL THF, the mixture was treated with 1.07 mL of 28-30% NH₄OH and the whole stirred for 1.5 h to give 49% of the title compound (m. 165-166°).

IT 192819-48-0P

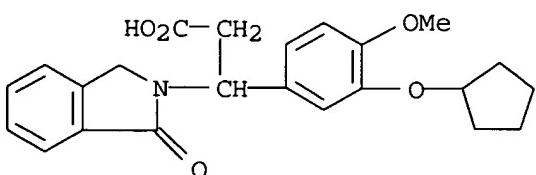
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and esterification with MeOH; preparation of

3-phthalimido-3-(3-cyclopentyloxy-4-methoxyphenyl)propionamide and related compds. as immunotherapeutic agents)

RN 192819-48-0 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β-[3-(cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

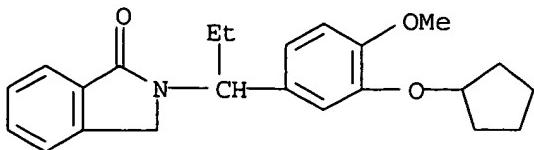


IT 192819-45-7P 192819-49-1P

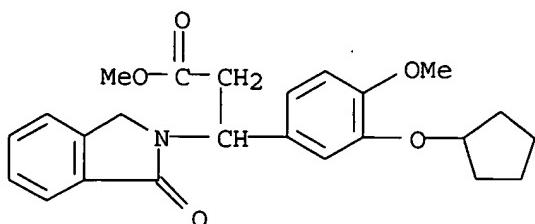
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 3-phthalimido-3-(3-cyclopentyloxy-4-methoxyphenyl)propionamide and related compds. as immunotherapeutic agents)

RN 192819-45-7 HCPLUS

CN 1H-Isoindol-1-one, 2-[1-[3-(cyclopentyloxy)-4-methoxyphenyl]propyl]-2,3-dihydro- (9CI) (CA INDEX NAME)



RN 192819-49-1 HCAPLUS

CN 2H-Isoindole-2-propanoic acid, β -[3-(cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 34 OF 39 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:15705 HCAPLUS

DOCUMENT NUMBER: 128:106406

TITLE: Immunotherapeutic imides/amides

INVENTOR(S): Muller, George W.; Shire, Mary; Stirling, David I.

PATENT ASSIGNEE(S): Celgene Corp., USA

SOURCE: U.S., 14 pp., Cont.-in-part of U.S. Ser. No. 366,667, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 5703098 | A | 19971230 | US 1996-759788 | 19961203 |
| EP 797437 | A1 | 19971001 | EP 1995-940063 | 19951120 |
| EP 797437 | B1 | 20010418 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
HU 77978 | A2 | 19990128 | HU 1997-1842 | 19951120 |
| RU 2164514 | C2 | 20010327 | RU 1997-112903 | 19951120 |
| AT 200621 | E | 20010515 | AT 1995-940063 | 19951120 |
| ES 2155537 | T3 | 20010516 | ES 1995-940063 | 19951120 |
| PT 797437 | T | 20010731 | PT 1995-940063 | 19951120 |
| CZ 290372 | B6 | 20020717 | CZ 1997-2035 | 19951120 |
| PL 185101 | B1 | 20030228 | PL 1995-321071 | 19951120 |
| CA 2273002 | AA | 19980611 | CA 1997-2273002 | 19971203 |
| WO 9824763 | A2 | 19980611 | WO 1997-US22369 | 19971203 |
| WO 9824763 | A3 | 19980806 | | |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, | | | | |

KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG,
 US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
 GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
 GN, ML, MR, NE, SN, TD, TG
 AU 9855945 A1 19980629 AU 1998-55945 19971203
 AU 735540 B2 20010712
 EP 942902 A2 19990922 EP 1997-952302 19971203
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 CN 1254333 A 20000524 CN 1997-180323 19971203
 NZ 336713 A 20010223 NZ 1997-336713 19971203
 JP 2001506611 T2 20010522 JP 1998-525844 19971203
 RU 2177471 C2 20011227 RU 1999-113849 19971203
 FI 9901187 A 19990716 FI 1999-1187 19990525
 PRIORITY APPLN. INFO.: US 1994-366667 B2 19941230
 WO 1995-US15119 W 19951120
 US 1996-759788 A 19961203
 WO 1997-US22369 W 19971203

OTHER SOURCE(S): MARPAT 128:106406

AB Imide/amide ethers and alcs. are inhibitors of cytokines including tumor necrosis factor α and can be used to combat cachexia, endotoxic shock, arthritis, asthma, and retrovirus replication. A typical embodiment is 3-phthalimido-3-(3',4'-dimethoxyphenyl)propan-1-ol (I). I was prepared by treating 3-amino-3-(3',4'-dimethoxyphenyl)-1-propanol with phthalic anhydride. Formulations for tablets, capsules, and injections containing active ingredients are provided.

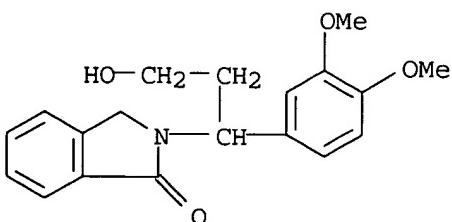
IT 201408-21-1 201408-23-3 201408-24-4
 201408-26-6 201408-27-7 201408-28-8
 201408-29-9 201408-33-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of imides and amides as cytokine inhibitors)

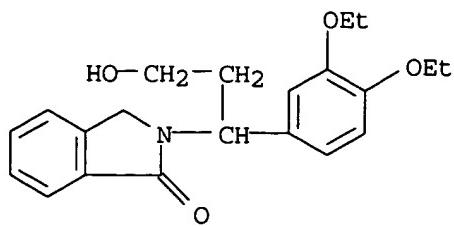
RN 201408-21-1 HCPLUS

CN 1H-Isoindol-1-one, 2-[1-(3,4-dimethoxyphenyl)-3-hydroxypropyl]-2,3-dihydro-
 (9CI) (CA INDEX NAME)

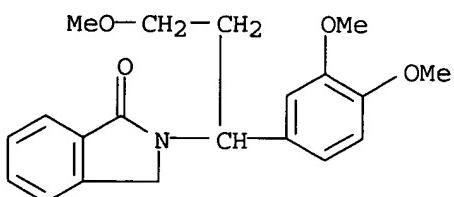


RN 201408-23-3 HCPLUS

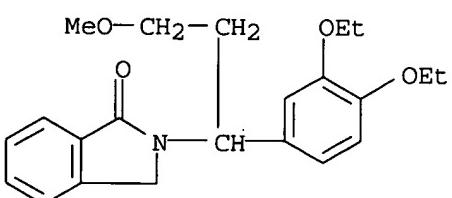
CN 1H-Isoindol-1-one, 2-[1-(3,4-diethoxyphenyl)-3-hydroxypropyl]-2,3-dihydro-
 (9CI) (CA INDEX NAME)



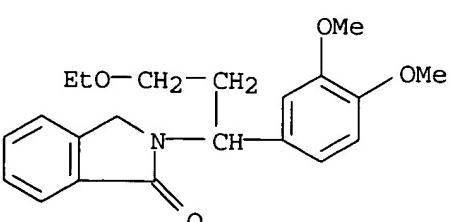
RN 201408-24-4 HCPLUS
CN 1H-Isoindol-1-one, 2-[1-(3,4-dimethoxyphenyl)-3-methoxypropyl]-2,3-dihydro- (9CI) (CA INDEX NAME)



RN 201408-26-6 HCPLUS
CN 1H-Isoindol-1-one, 2-[1-(3,4-diethoxyphenyl)-3-methoxypropyl]-2,3-dihydro- (9CI) (CA INDEX NAME)



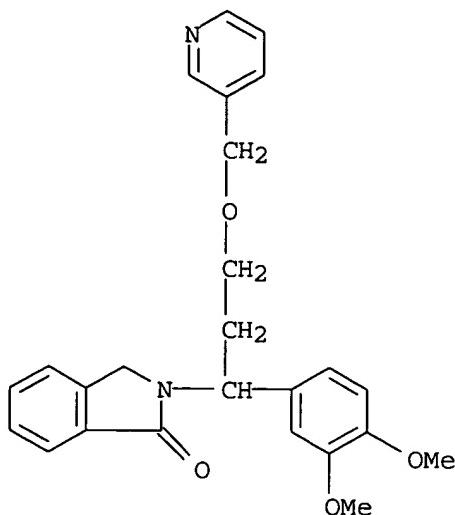
RN 201408-27-7 HCPLUS
CN 1H-Isoindol-1-one, 2-[1-(3,4-dimethoxyphenyl)-3-ethoxypropyl]-2,3-dihydro- (9CI) (CA INDEX NAME)



RN 201408-28-8 HCPLUS
CN 1H-Isoindol-1-one, 2-[1-(3,4-dimethoxyphenyl)-3-(3-pyridinylmethoxy)propyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

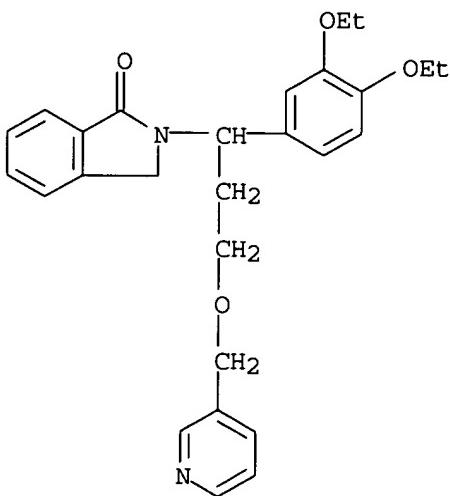
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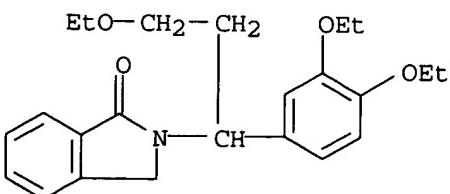
RN 201408-29-9 HCAPLUS

CN 1H-Isoindol-1-one, 2-[1-(3,4-diethoxyphenyl)-3-(3-pyridinylmethoxy)propyl]-2,3-dihydro- (9CI) (CA INDEX NAME)



RN 201408-33-5 HCAPLUS

CN 1H-Isoindol-1-one, 2-[1-(3,4-diethoxyphenyl)-3-ethoxypropyl]-2,3-dihydro- (9CI) (CA INDEX NAME)



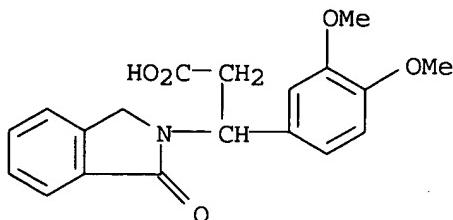
IT 167886-75-1

10748085.trn

Page 146

14:13

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of imides and amides as cytokine inhibitors)
 RN 167886-75-1 HCAPLUS
 CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

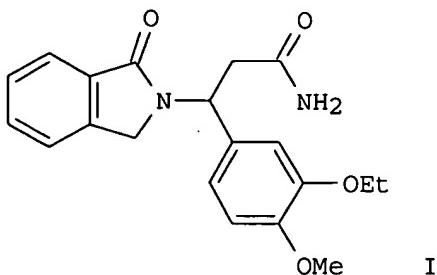


L10 ANSWER 35 OF 39 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1998:1310 HCAPLUS
 DOCUMENT NUMBER: 128:75298
 TITLE: Cyclic amides
 INVENTOR(S): Muller, George W.
 PATENT ASSIGNEE(S): Celgene Corp., USA
 SOURCE: U.S., 25 pp., Cont.-in-part of U.S. 5,605,914.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------------|-----------------|----------|
| US 5698579 | A | 19971216 | US 1996-703708 | 19960827 |
| US 5463063 | A | 19951031 | US 1993-140237 | 19931020 |
| US 5605914 | A | 19970225 | US 1994-258587 | 19940610 |
| EP 1004580 | A2 | 20000531 | EP 2000-200491 | 19940701 |
| EP 1004580 | A3 | 20021002 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| EP 1004581 | A2 | 20000531 | EP 2000-200492 | 19940701 |
| EP 1004581 | A3 | 20020814 | | |
| EP 1004581 | B1 | 20040922 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| EP 1004572 | A2 | 20000531 | EP 2000-200498 | 19940701 |
| EP 1004572 | A3 | 20021002 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| EP 1477486 | A2 | 20041117 | EP 2004-77075 | 19940701 |
| EP 1477486 | A3 | 20041215 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| US 5877200 | A | 19990302 | US 1997-920715 | 19970829 |
| US 6075041 | A | 20000613 | US 1998-158612 | 19980922 |
| US 6200987 | B1 | 20010313 | US 2000-547085 | 20000411 |
| US 2003144325 | A1 | 20030731 | US 2003-337602 | 20030106 |
| PRIORITY APPLN. INFO.: | | | | |
| | | US 1993-87510 | B2 | 19930702 |
| | | US 1993-140237 | A2 | 19931020 |
| | | US 1994-258587 | A2 | 19940610 |
| | | EP 1994-921439 | A3 | 19940701 |
| | | EP 2000-200492 | A3 | 19940701 |
| | | US 1996-703708 | A3 | 19960827 |

| | |
|----------------|-------------|
| US 1997-920715 | A3 19970829 |
| US 1998-158612 | A3 19980922 |
| US 1999-230389 | A3 19990507 |
| US 2000-543809 | A1 20000406 |
| US 2001-781179 | A1 20010212 |

OTHER SOURCE(S) : MARPAT 128:75298
GI



AB Cyclic amides such as I are prepared. Thus, I was prepared in 2 steps starting from 3-amino-3-(3-ethoxy-4-methoxyphenyl)propionic acid and phthalaldehyde.

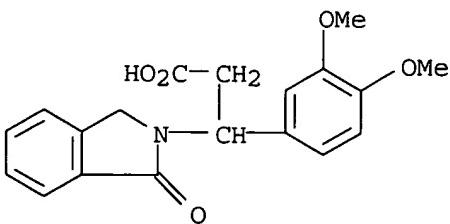
IT **167886-75-1P 200483-25-6P**

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);
USES (Uses)

(cyclic amides as potential tumor necrosis factor inhibitors)

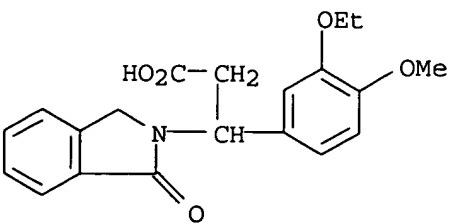
RN 167886-75-1 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 200483-25-6 HCPLUS

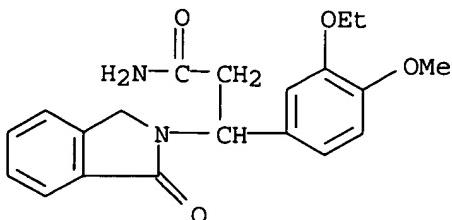
CN 2H-Isoindole-2-propanoic acid, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



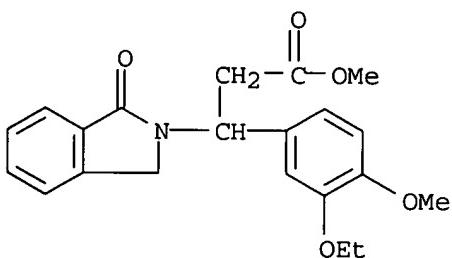
IT 188684-83-5P 200483-34-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(cyclic amides as potential tumor necrosis factor inhibitors)

RN 188684-83-5 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

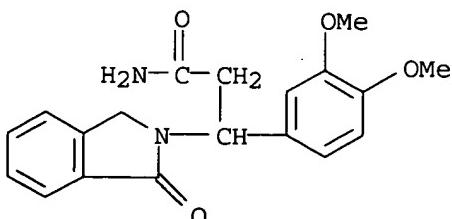
RN 200483-34-7 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

IT 167886-76-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cyclic amides as potential tumor necrosis factor inhibitors)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

L10 ANSWER 36 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:506832 HCPLUS

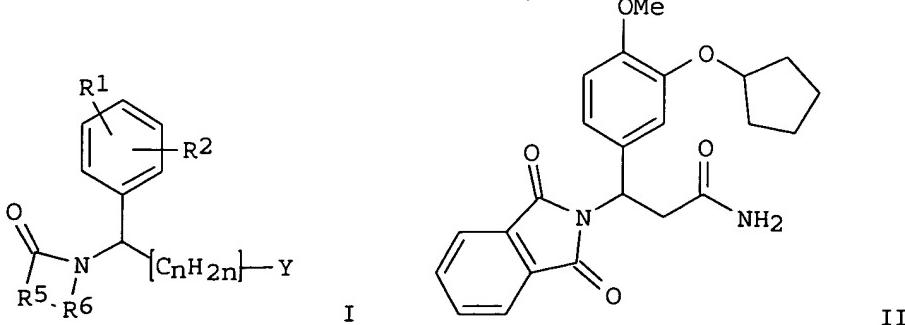
DOCUMENT NUMBER: 127:121630

TITLE: Preparation of imides as PDE III, PDE IV and THF

INVENTOR(S): inhibitors
Muller, George W.; Shire, Mary
PATENT ASSIGNEE(S): Celgene Corporation, USA; Muller, George W.; Shire,
Mary
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 9723457 | A1 | 19970703 | WO 1996-US20616 | 19961224 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US 5728844 | A | 19980317 | US 1995-578738 | 19951226 |
| AU 9714685 | A1 | 19970717 | AU 1997-14685 | 19961224 |
| AU 723331 | B2 | 20000824 | | |
| EP 874819 | A1 | 19981104 | EP 1996-945277 | 19961224 |
| EP 874819 | B1 | 20040526 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2000502350 | T2 | 20000229 | JP 1997-523858 | 19961224 |
| RU 2174512 | C2 | 20011010 | RU 1998-113943 | 19961224 |
| IL 125086 | A1 | 20021110 | IL 1996-125086 | 19961224 |
| AT 267806 | E | 20040615 | AT 1996-945277 | 19961224 |
| FI 9801437 | A | 19980825 | FI 1998-1437 | 19980622 |
| HK 1017620 | A1 | 20030516 | HK 1999-102856 | 19990706 |
| PRIORITY APPLN. INFO.: | | | US 1995-578738 | A 19951226 |
| | | | US 1995-520710 | A2 19950829 |
| | | | WO 1996-US20616 | W 19961224 |

OTHER SOURCE(S) : MARPAT 127:121630
GI



AB The title compds. [I; one of R₁ and R₂ = R₃X and the other = H, NO₂, CN,

etc; (R3 = monocycloalkyl, bicycloalkyl, etc.; X = a bond, CH₂, O, N); R5 = (un)substituted o-phenylene, vicinally divalent residue of pyridine, pyrrolidine, etc.; R6 = CO, CH₂, CH₂CO; Y = COZ, lower alkyl, aryl, etc.; Z = NH₂, OH, OCH₂Ph, etc.; n = 0-3], inhibitors of TNF α , phosphodiesterase and NF- κ B activation which can be used to combat cachexia, endotoxic shock, retrovirus replication, asthma, and inflammatory conditions, were prepared and formulated. Thus, reaction of 3-cyclopentyloxy-4-methoxybenzaldehyde with malonic acid in the presence of AcONH₄ in EtOH followed by reaction of the resulting 3-amino-3-(3-cyclopentyloxy-4-methoxyphenyl)propionic acid with N-carbethoxypthalimide in the presence of Na₂CO₃ in H₂O/MeCN, and treatment of 3-phthalimido-3-(3-cyclopentyloxy-4-methoxyphenyl)propionic acid with NH₄OH in the presence of 1,1'-carbonyldiimidazole and DMAP in THF afforded 3-phthalimido-3-(3-cyclopentyloxy-4-methoxyphenyl)propionamide (II).

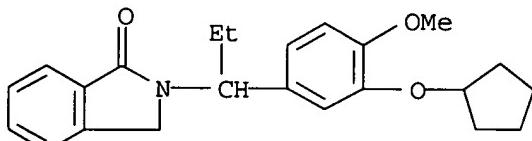
IT 192819-45-7P 192819-48-0P 192819-49-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of imides as PDE III, PDE IV and THF inhibitors)

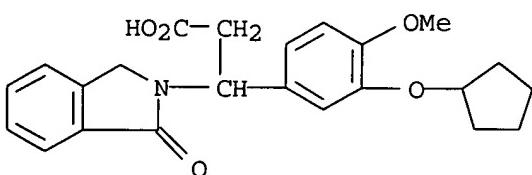
RN 192819-45-7 HCPLUS

CN 1H-Isoindol-1-one, 2-[1-[3-(cyclopentyloxy)-4-methoxyphenyl]propyl]-2,3-dihydro- (9CI) (CA INDEX NAME)



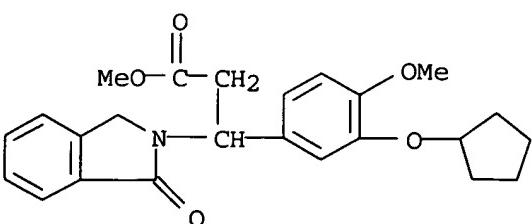
RN 192819-48-0 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -[3-(cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 192819-49-1 HCPLUS

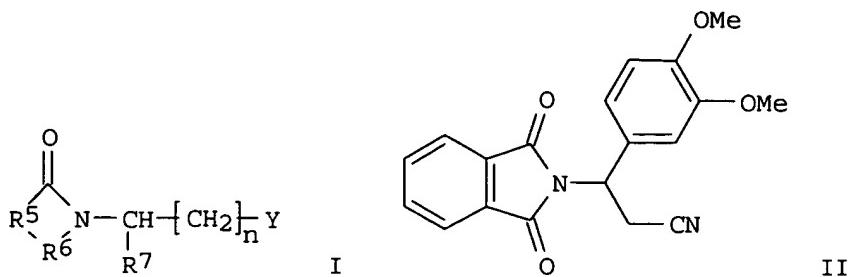
CN 2H-Isoindole-2-propanoic acid, β -[3-(cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



L10 ANSWER 37 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1997:276450 HCPLUS
 DOCUMENT NUMBER: 126:251071
 TITLE: Preparation of novel heterocyclicalkanenitriles as
 inhibitors of tumor necrosis factor α
 INVENTOR(S): Muller, George W.; Shire, Mary
 PATENT ASSIGNEE(S): Celgene Corporation, USA; Muller, George W.; Shire,
 Mary
 SOURCE: PCT Int. Appl., 24 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 9708143 | A1 | 19970306 | WO 1996-US14077 | 19960829 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,
LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA | | | | |
| US 5728845 | A | 19980317 | US 1995-520710 | 19950829 |
| CA 2230487 | AA | 19970306 | CA 1996-2230487 | 19960829 |
| AU 9669632 | A1 | 19970319 | AU 1996-69632 | 19960829 |
| AU 716775 | B2 | 20000309 | | |
| EP 851857 | A1 | 19980708 | EP 1996-930664 | 19960829 |
| EP 851857 | B1 | 20040218 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI | | | | |
| EP 957091 | A1 | 19991117 | EP 1999-200946 | 19960829 |
| EP 957091 | B1 | 20030604 | | |
| R: GB | | | | |
| JP 2000500118 | T2 | 20000111 | JP 1997-510629 | 19960829 |
| NZ 318212 | A | 20010525 | NZ 1996-318212 | 19960829 |
| RU 2196134 | C2 | 20030110 | RU 1998-105689 | 19960829 |
| CZ 291613 | B6 | 20030416 | CZ 1998-609 | 19960829 |
| EP 1367051 | A2 | 20031203 | EP 2003-77311 | 19960829 |
| EP 1367051 | A3 | 20031217 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI | | | | |
| AT 259787 | E | 20040315 | AT 1996-930664 | 19960829 |
| PT 851857 | T | 20040730 | PT 1996-930664 | 19960829 |
| SK 284144 | B6 | 20041005 | SK 1998-272 | 19960829 |
| ES 2216059 | T3 | 20041016 | ES 1996-930664 | 19960829 |
| FI 9800038 | A | 19980224 | FI 1998-38 | 19980109 |
| HK 1022692 | A1 | 20031031 | HK 2000-101665 | 20000320 |
| PRIORITY APPLN. INFO.: | | | US 1995-520710 | A 19950829 |
| | | | EP 1996-930664 | A3 19960829 |
| | | | WO 1996-US14077 | W 19960829 |

OTHER SOURCE(S): MARPAT 126:251071
 GI



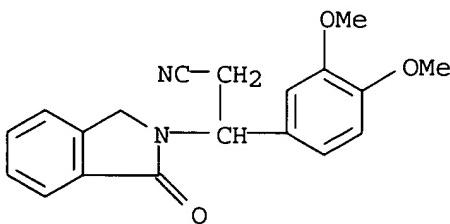
AB The title compds. [I; Y = CN, C(O)(CH₂)_mMe (wherein m = 0-3); R₅ = (un)substituted o-phenylene, a divalent C₄-10 cycloalkyl, etc.; R₆ = CO, CH₂, CH₂CO, SO₂; R₇ = C₁-12 alkyl, C₄-12 cyclic or bicyclic alkyl, etc.; n = 0-3], inhibitors of tumor necrosis factor α and phosphodiesterases, particularly PDE III and PDE IV, and can be used to combat cachexia, endotoxic shock, retrovirus replication, asthma, and inflammatory conditions, were prepared and formulated. Thus, dehydratation of 3-phthalimido-3-(3,4-dimethoxyphenyl)propionamide with SOC₁₂ in the presence of 4-methylmorpholine in DMF afforded 79% the title compound II. Compds. I are effective at 1-1000 mg/day.

IT 188684-79-9P 188684-80-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel heterocyclalkanenitriles as inhibitors of tumor necrosis factor α)

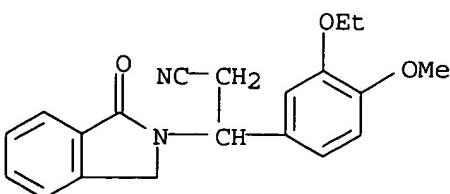
RN 188684-79-9 HCPLUS

CN 2H-Isoindole-2-propanenitrile, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



RN 188684-80-2 HCPLUS

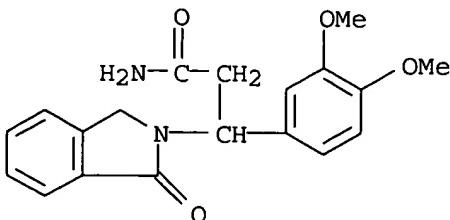
CN 2H-Isoindole-2-propanenitrile, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



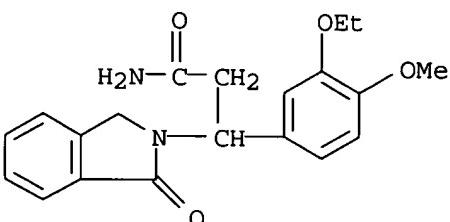
IT 167886-76-2 188684-83-5

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of novel heterocyclalkanenitriles as inhibitors of tumor
 necrosis factor α)

RN 167886-76-2 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo-
 (9CI) (CA INDEX NAME)

RN 188684-83-5 HCAPLUS

CN 2H-Isoindole-2-propanamide, β -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-
 1-oxo- (9CI) (CA INDEX NAME)

L10 ANSWER 38 OF 39 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:169160 HCAPLUS

DOCUMENT NUMBER: 126:199454

TITLE: Preparation of cyclic imides as inhibitors of tumor
 necrosis factor α

INVENTOR(S): Muller, George W.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: U.S., 22 pp., Cont.-in-part of U.S. Ser. No. 87,510,
 abandoned.

DOCUMENT TYPE: CODEN: USXXAM

LANGUAGE: Patent

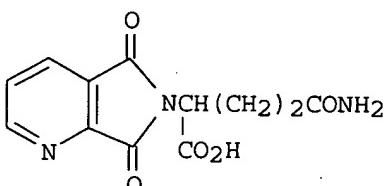
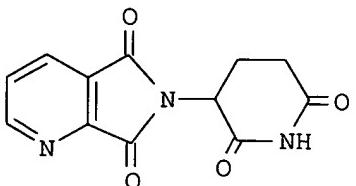
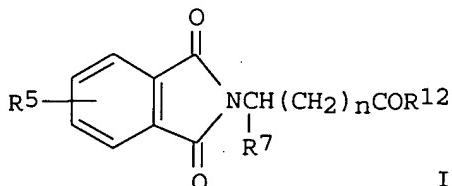
FAMILY ACC. NUM. COUNT: 7 English

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 5605914 | A | 19970225 | US 1994-258587 | 19940610 |
| US 5463063 | A | 19951031 | US 1993-140237 | 19931020 |
| EP 1004580 | A2 | 20000531 | EP 2000-200491 | 19940701 |
| EP 1004580 | A3 | 20021002 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| EP 1004581 | A2 | 20000531 | EP 2000-200492 | 19940701 |
| EP 1004581 | A3 | 20020814 | | |

| | | | | |
|---|----|----------|----------------|-------------|
| EP 1004581 | B1 | 20040922 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| EP 1004572 | A2 | 20000531 | EP 2000-200498 | 19940701 |
| EP 1004572 | A3 | 20021002 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| EP 1477486 | A2 | 20041117 | EP 2004-77075 | 19940701 |
| EP 1477486 | A3 | 20041215 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| US 5698579 | A | 19971216 | US 1996-703708 | 19960827 |
| US 5877200 | A | 19990302 | US 1997-920715 | 19970829 |
| US 6075041 | A | 20000613 | US 1998-158612 | 19980922 |
| US 6200987 | B1 | 20010313 | US 2000-547085 | 20000411 |
| US 2003144325 | A1 | 20030731 | US 2003-337602 | 20030106 |
| PRIORITY APPLN. INFO.: | | | US 1993-87510 | B2 19930702 |
| | | | US 1993-140237 | A2 19931020 |
| | | | US 1994-258587 | A2 19940610 |
| | | | EP 1994-921439 | A3 19940701 |
| | | | EP 2000-200492 | A3 19940701 |
| | | | US 1996-703708 | A3 19960827 |
| | | | US 1997-920715 | A3 19970829 |
| | | | US 1998-158612 | A3 19980922 |
| | | | US 1999-230389 | A3 19990507 |
| | | | US 2000-543809 | A1 20000406 |
| | | | US 2001-781179 | A1 20010212 |

GI



AB Cyclic imides, such as I [R5 = H, NO₂, CN, CF₃, CO₂Et, CO₂Me, CO₂Pr, Ac, CONH₂, AcO, CO₂H, OH, NH₂, alkyl, alkoxy, halo; R7 = pyridyl, substituted Ph, (un)substituted benzyl, naphthyl, benzyloxy, imidazol-4-ylmethyl; R12 = amino, OH, ester; n = 0-3], are inhibitors of tumor necrosis factor α and can be used to combat cachexia, endotoxic shock, and retrovirus replication. Thus, I (R5 = H, R7 = 4-MeOC₆H₄, R12 = NH₂, n = 1) was prepared from 3-(4-MeOC₆H₄)CH(NH₂)CH₂CO₂H and N-(carboethoxy)phthalimide via amidation of the phthalimidopropionic acid. Also, 2-(2,6-dioxo-3-piperidinyl)-4-azaisoindoline-1,3-dione (II) was prepared from L-glutamine and 2,3-pyridinedicarboxylic anhydride via intramol. cyclization of glutaramic acid III.

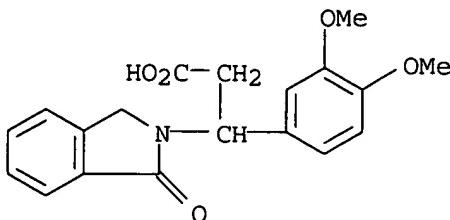
IT 167886-75-1P
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);
 USES (Uses)

(preparation of cyclic imides as inhibitors of tumor necrosis factor
 α)

RN 167886-75-1 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)

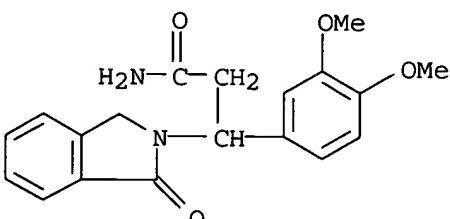


IT 167886-76-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of cyclic imides as inhibitors of tumor necrosis factor
 α)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



L10 ANSWER 39 OF 39 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:797249 HCPLUS

DOCUMENT NUMBER: 123:198617

TITLE: Imides as inhibitors of TNF alpha

INVENTOR(S): Muller, George W.

PATENT ASSIGNEE(S): Celgene Corp., USA

SOURCE: PCT Int. Appl., 89 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

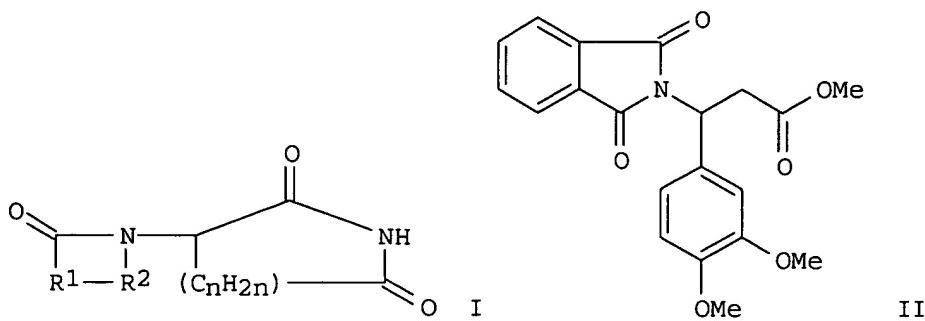
FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 9501348 | A2 | 19950112 | WO 1994-US7411 | 19940701 |
| WO 9501348 | A3 | 19950309 | | |
| W: AU, CA, CZ, FI, HU, JP, KR, NZ, PL, RU, SK, UA, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |

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|---|----|----------|-----------------|----------|
| CA 2166315 | AA | 19950112 | CA 1994-2166315 | 19940701 |
| AU 9472167 | A1 | 19950124 | AU 1994-72167 | 19940701 |
| AU 687843 | B2 | 19980305 | | |
| EP 706521 | A1 | 19960417 | EP 1994-921439 | 19940701 |
| EP 706521 | B1 | 20021002 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| JP 09500872 | T2 | 19970128 | JP 1995-503648 | 19940701 |
| HU 75312 | A2 | 19970528 | HU 1996-3 | 19940701 |
| EP 1004580 | A2 | 20000531 | EP 2000-200491 | 19940701 |
| EP 1004580 | A3 | 20021002 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| EP 1004581 | A2 | 20000531 | EP 2000-200492 | 19940701 |
| EP 1004581 | A3 | 20020814 | | |
| EP 1004581 | B1 | 20040922 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| EP 1004572 | A2 | 20000531 | EP 2000-200498 | 19940701 |
| EP 1004572 | A3 | 20021002 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| PL 180377 | B1 | 20010131 | PL 1994-312386 | 19940701 |
| RU 2174516 | C2 | 20011010 | RU 1996-102001 | 19940701 |
| AT 225344 | E | 20021015 | AT 1994-921439 | 19940701 |
| PT 706521 | T | 20030228 | PT 1994-921439 | 19940701 |
| ES 2184765 | T3 | 20030416 | ES 1994-921439 | 19940701 |
| AT 277036 | E | 20041015 | AT 2000-200492 | 19940701 |
| EP 1477486 | A2 | 20041117 | EP 2004-77075 | 19940701 |
| EP 1477486 | A3 | 20041215 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| CZ 294444 | B6 | 20050112 | CZ 2003-663 | 19940701 |
| PT 1004581 | T | 20050131 | PT 2000-200492 | 19940701 |
| ES 2226696 | T3 | 20050401 | ES 2000-200492 | 19940701 |
| FI 9506362 | A | 19960226 | FI 1995-6362 | 19951229 |
| FI 114984 | B1 | 20050215 | | |
| US 6476052 | B1 | 20021105 | US 2000-633908 | 20000807 |
| HK 1025769 | A1 | 20050408 | HK 2000-104989 | 20000810 |
| US 2003144325 | A1 | 20030731 | US 2003-337602 | 20030106 |
| FI 2004000593 | A | 20040427 | FI 2004-593 | 20040427 |
| PRIORITY APPLN. INFO.: | | | | |
| US 1993-87510 A 19930702 | | | | |
| EP 1994-921439 A3 19940701 | | | | |
| EP 2000-200492 A3 19940701 | | | | |
| WO 1994-US7411 W 19940701 | | | | |
| US 1996-690258 A1 19960724 | | | | |
| US 1996-701494 A1 19960822 | | | | |
| US 1997-48278P P 19970530 | | | | |
| WO 1997-US13375 A1 19970724 | | | | |
| US 1999-230389 B3 19990507 | | | | |
| US 2000-543809 A1 20000406 | | | | |
| US 2001-781179 A1 20010212 | | | | |

OTHER SOURCE(S) : MARPAT 123:198617
GI



AB A variety of cyclic imides and certain acyclic analogs and/or precursors are inhibitors of tumor necrosis factor α (no data) and can be used to combat cachexia, endotoxic shock, and retrovirus replication. One subgroup of the compds. is I [R1 = divalent residue of 3,4-pyridine, pyrrolidine, imidazole, naphthalene, thiophene, or C2-6 alkane (un)substituted by (un)substituted Ph; R2 = CO, SO₂; n = 1-3]. A typical embodiment from a different subgroup is Me 3-phthalimido-3-(3,4-dimethoxyphenyl)propionate, i.e. II, which was prepared from 3,4-(MeO)₂C₆H₃CH(NH₂)CH₂CO₂H by conversion to the Me ester hydrochloride with SOC₁₂ and MeOH (66%) and reaction of this with N-(carboethoxy)phthalimide in the presence of Na₂CO₃ in aqueous MeCN (92%). A total of 93 synthetic examples and 6 formulations are given.

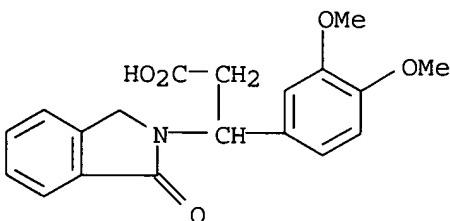
IT **167886-75-1P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of cyclic imides and analogs as TNF- α inhibitors)

RN 167886-75-1 HCPLUS

CN 2H-Isoindole-2-propanoic acid, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



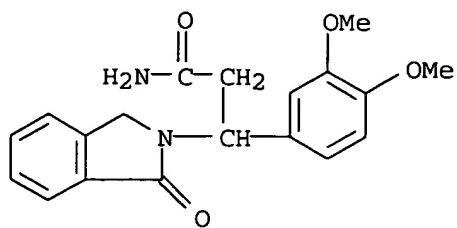
IT **167886-76-2P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of cyclic imides and analogs as TNF- α inhibitors)

RN 167886-76-2 HCPLUS

CN 2H-Isoindole-2-propanamide, β -(3,4-dimethoxyphenyl)-1,3-dihydro-1-oxo- (9CI) (CA INDEX NAME)



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COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

255.35

592.56

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

ENTRY

TOTAL

CA SUBSCRIBER PRICE

-35.25

-35.25

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